



UAS and SmallSat Weekly News

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DroneUp and DroneInsurance.com Collaborate to Provide Liability Insurance Solutions for sUAS Pilots Flying Humanitarian Missions in VA, NC, and SC

amy.wiegand@droneup.com



Chesapeake, VA (September 12, 2018) – DroneUp is helping small Unmanned Aerial Systems pilots and government agencies in South Carolina, North Carolina, and Virginia prepare for potential humanitarian sUAS missions after Hurricane Florence.

DroneUp is pleased to announce it is collaborating with REIN's DroneInsurance.com to provide on-demand flight liability coverage for missions flown by DroneUp Part 107 pilots in response to state or municipality requests. The coverage will be carried by DroneUp at no additional charge to its participating pilots.

The use of drones has proven invaluable after storms for search and rescue, damage assessment and gaining immediate situational awareness of conditions. "We are very appreciative of the DroneInsurance.com team working with DroneUp to protect these critical missions. Securing essential flight insurance provides even further risk mitigation for sUAS operations in what may be challenging conditions," said Anthony Vittone, Chief Operations Officer for DroneUp. <https://www.droneup.com/2018/09/13/droneinsurance/>

Delair Receives Funding From Intel Capital to Drive Innovation In UAS Market

September 13, 2018 News



Delair has recently closed its **expansion round** with an investment from Intel Capital. For the past year, Delair and Intel have been collaborating on the Intel® Insight Platform, a cloud-based digital asset management solution that leverages Delair's software analytics.

The funding will be used to accelerate the development of the [Intel Insight Platform](#)—a data processing, visualization, analytics and reporting service that allows customers to store, organize and share data provided by commercial drone systems.

"This investment will help make aerial-based data collection and analysis an effective business intelligence approach for more enterprises," said Anil Nanduri, Vice President, General



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Manager of the Drones Group, Intel Corporation. http://uasweekly.com/2018/09/13/delair-receives-funding-from-intel-capital-to-drive-innovation-in-uas-market/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_newsletter_2018_09_13&utm_term=2018-09-13

US Nuclear Performs Drone-RAD Flight Demonstration for Urban Shield Event

September 13, 2018 News



US Nuclear Corp. participated in the Urban Shield event September 7-10, 2018 in the Bay Area. It is a disaster training exercise involving local, national and international first responder agencies including the national guard, police and fire departments, search & rescue, homeland security, FBI, FEMA and DOE. The goal is to evaluate the preparedness and the capabilities of first responders in response to threats in high-density areas.

US Nuclear Corp. participated in a scenario where a car containing radioactive material had been blown up. Radioactive sources were placed in/near the blown-up vehicle, and it was up to the company to use their drone to fly over the incident area to map the radioactive hotspots before emergency responders moved in to mitigate the situation.

The company flew an octocopter designed to detect radioactive gamma emitting hotspots on the ground and log and transmit the GPS-tagged data in real-time. The mission demonstrated its ability to measure and pinpoint the gamma sources and overlay the data on Google Maps so first responders could visualize the radioactive zones and where the concentration was the highest. The emergency service personnel present agreed that the Drone-RAD is a tool that first-responders should have for emergencies involving radiation exposure.

http://uasweekly.com/2018/09/13/us-nuclear-performs-drone-rad-flight-demonstration-for-urban-shield-event/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_newsletter_2018_09_13&utm_term=2018-09-13

Spry: Kickstarter drone that submerges, floats and flies! September 13, 2018 Thomas Luna

SwellPro and Urban Drones teamed up to release what they consider “the **only** waterproof drone that submerges [under water](#), floats like a boat and flies in the air.”



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The controller can be used in direct rain so it is also dust tight and protected against heavy seas or powerful jets of water. The drone can lift off after being thrown into a body of water. The camera is enclosed in a polycarbonate dome, and the shading around the dome is designed to filter excessive glare.

It comes equipped with a camera that can shoot up to 30 FPS using a 64 Mbps bitrate. Currently, the only supported photo format is JPEG. The camera is also stabilized using a vertical axis mechanical gimbal and electronic stabilization. It is built to fly up to **17 minutes**, and it can go as fast as 43 mph in manual mode. The quadcopter's altitude is capped at 656 feet, but it can go as far as 2,624 feet. <https://www.wetalkuav.com/spry-kickstarter-drone-that-submerges-floats-and-flies/>

AeroVironment \$5.9 Million Contract to Procure Raven UAS for the Portuguese Army September 14, 2018 Military



AeroVironment, Inc., announced today the receipt of a fixed-price contract award valued at \$5,962,494. The contract award encompasses the procurement of Raven™ unmanned aircraft systems equipped with Mantis i23 sensors and pocket Remote Video Terminals for the Portuguese Army, with delivery scheduled over a three-year period.

“Our small UAS deliver situational awareness directly to frontline warfighters at a fraction of the procurement and lifecycle cost of larger UAS. The Raven system will provide the Portuguese Army with rapid and effective force protection as well as interoperability capabilities with NATO forces, supporting coalition mission integration,” said Kirk Flittie, vice president and general manager of AeroVironment’s Unmanned Aircraft Systems business.

With the Family of Systems concept, customers can add other AeroVironment small UAS to augment their capabilities while utilizing the same ground control station and software providing for interoperability across NATO forces. The Portuguese Army’s adoption of the



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Raven system represents the **18th of 29 NATO member nations** to adopt the company's family of small UAS. http://uasweekly.com/2018/09/14/aerovironment-5-9-million-contract-to-procure-raven-unmanned-aircraft-systems-for-the-portuguese-army/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_newsletter_2018_09_14&utm_term=2018-09-14

8 Ways Unmanned Aircraft Systems will Respond to Hurricane Florence September 14, 2018 Drones At Work | News



Drones will be the very first aircraft gathering high-resolution imagery and data from the flooding and destruction caused by Hurricane Florence. Here are **eight types of UAS operations** you will see in response to the storm:

SITUATIONAL AWARENESS The purpose of this flight will be three-fold; (1) to ensure that all aviation flight, control, and data capture systems are working properly, (2) to rapidly assess damage to the surrounding area and (3) to determine what level of mobile communications bandwidth is available for transferring imagery to the command or emergency operations center.

DAMAGE ASSESSMENT This imagery will help incident commanders, emergency managers, and elected officials grasp the true scope of the devastation.

SEARCH AND RESCUE Several FEMA teams are prepared to use drones to conduct aerial search operations in neighborhoods and other areas inaccessible by other assets due to heavy flooding, fallen trees and downed power lines.

NEWS GATHERING AND PUBLIC INFORMATION The news media will be among the first to have drones in the air to capture imagery of the storm's impact.

CRITICAL INFRASTRUCTURE INSPECTION UAS flight teams will be used to quickly assess the integrity of infrastructure such as dams, bridges, roadways, telecommunications towers, the power grid and key buildings such as EOC's, power plants, hospitals and military installations.

TELECOMMUNICATIONS AND POWER RESTORATION Drone teams will be capturing imagery of cell towers and power distributions lines to restore these essential services as quickly as possible.



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AERIAL MAPPING Drones will offer cost-efficient, targeted, high-resolution imagery that can provide sub-centimeter accuracy for aerial mapping and change detection.

INSURANCE CLAIMS PROCESSING Smart insurance companies will be combining satellite imagery from companies like [Airbus Aerial](#) with high-resolution imagery to provide some of the most comprehensive claims analytics the insurance industry has ever seen.

http://uasweekly.com/2018/09/14/8-ways-unmanned-aircraft-systems-will-respond-to-hurricane-florence/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_newsletter_2018_09_14&utm_term=2018-09-14

16Sep18

Erie officials sound alarm on drone use *Anthony Hahn* hahna@dailycamera.com 09/15/2018



A plane takes off from the Erie Airport

An uptick in recreational drone usage in Broomfield's Anthem Ranch neighborhood has spurred officials with the Erie Municipal Airport, the subdivision's neighbor, to reach out to the **homeowners association** with concerns the activity could soon affect air travel.

"While **airport management cannot give permission** for (unmanned aerial vehicle) activity in the vicinity of the airport," federal regulations **require drone operators to notify nearby airports** before they fly drones within 5 miles.

Erkki Gronholm, an Anthem Ranch resident heading up the neighborhood's examination of the issue, said Friday the answer might exist in a piece of Broomfield's municipal code banning drone usage except in designated areas. Gronholm's attorney is looking into the matter, he said. "At the end of the day," Hurd said, "it would be nice if the FAA just would say 'hey no drones (allowed) within so many miles of an airport,' but they haven't gone that far with it yet, so I will be interested to see if the HOA is able to **legally** come in and limit that usage."

http://www.timescall.com/longmont-local-news/ci_32140794/erie-officials-sound-alarm-drone-use



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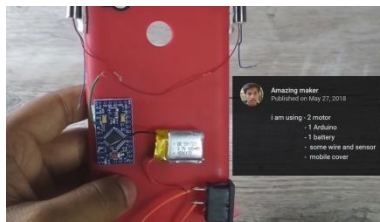
17Sep18

This DIY drone phone case might be fake, but it could still be the future of selfies! September 15, 2018 Thomas Luna



YouTuber Amazing maker uploaded a video showing how he attached drone parts onto a phone's case to make it fly. The YouTuber taped two motors, a 120 mAh battery, an on-and-off switch, some wires and a Arduino flight controller onto the back and sides of a phone case.

The self-made drone phone was apparently stable enough to shoot a selfie using the camera's timer.



By repositioning the taped motors, he was shown lying on his back and watching a YouTube video in landscape mode.

The two-propeller drone phone was displayed as fully stabilized while flying, even indoors! It could be a game changer for how selfies are taken in the future. There is already a market for [mini drones designed specifically for selfies](#), but a phone case that converts into a drone for photography is a **new level** of drone technology.. <https://www.wetalkuav.com/this-diy-drone-phone-case-might-be-fake-but-it-could-still-be-the-future-of-selfies/>

Drone Army Is Ready to Swoop in for Florence Power Recovery Naureen S Malik September 15, 2018 Bloomberg

More than 53 teams recruited to help with damage assessment. Drones can find damaged substations, even restring power lines

At least **53 drone teams** have been recruited to help with damage assessment, said Brian Reil, a spokesman for Edison Electric Institute, the Washington-based industry group coordinating utility recovery efforts. Each team usually brings more than one drone and the force collectively includes about 100 to 160 operators, he said.

Local providers including Duke Energy Corp. and Southern Co. are deploying aerial equipment



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fitted with infrared and high-zoom sensors that can inspect substations, locate malfunctioning solar panels and even help to restring power lines.



Take Hurricane Harvey last year: When it flooded Houston, CenterPoint Energy Inc. used drones to assess a substation, determined it was seriously damaged and then quickly built a back-up in a church parking lot, said Chris Behme, an energy and utilities partner at IBM.

IBM worked with the Texas utility during recovery efforts and expects drones to do similar work in the wake of Florence, he said. They can also be used to check hospital generators or alert residents if the local hardware store is open to get supplies, Behme said via telephone.

<https://www.bloomberg.com/news/articles/2018-09-15/drone-army-is-ready-to-swoop-in-for-florence-power-recovery>

Defense giants bet big on small satellites Aaron Gregg September 16



An artist's rendering of how BridgeSat's "space terminals" will work.

Major U.S. defense contractors are working to reinvent their satellite businesses to include satellites no larger than a microwave oven.

Last week, Boeing and Raytheon announced partnerships with start-ups focusing on small satellites, investing in Colorado-based BridgeSat and Virginia-based HawkEye360. Those announcements come as Bethesda-based Lockheed Martin expands its business with an Irvine, Calif.-based "nano-satellite" company called Terran Orbital.

"Companies like Boeing and Lockheed have an interest in getting into the small-satellite business because it feels like that's where the industry is going," said Marco Caceres, an analyst with the aerospace consultancy Teal Group. "They have decided that rather than develop their own in-house capabilities, they want to buy into it."

The market for smaller satellites, which are designed to orbit close to Earth's atmosphere, is growing quickly. According to a report by the Satellite Industry Association and Bryce Space and Technology, a total of **292** of the spacecraft were launched into space **last year**, compared with **55 in 2016**. https://www.washingtonpost.com/business/2018/09/16/defense-giants-bet-big-small-satellites/?utm_term=.b0f1a5c398d8

Russian REX-1 counter-UAV system breaks cover on exercise Andrew Galer, London - Jane's International Defence Review 14 September 2018



ZALA Aero Group's REX-1 anti-UAV weapon on trial on Exercise 'Vostok 18'

Images from Russia's major 'Vostok 2018' exercise on 13 September appear to show a production version of the REX-1 counter-unmanned aerial vehicle weapon in use by Russian Federation airborne troops. It is a rifle-like, man-portable jammer developed by Kalashnikov Group subsidiary ZALA Aero Group and first seen at a Russian defense exhibition in 2017. It does not appear to have a kinetic kill mechanism, relying on the jammer's ability to cut the UAV off from its operator, communications bearer, and autonomous navigation capability to neutralize the threat.

Suppression of GNSS signals can be made up to a 2 km radius around the system, with other communications blocked over a 30° front arc out to 500 m. That 2 km navigation-jamming range would make it difficult for the UAV to fall back on an automated recovery mode attempting to fly out of the jamming beam.

ZALA Aero also stated that the system includes laser and stroboscope modules, presumably enabling an operator to dazzle and neutralize electro-optical/infrared sensors in addition to blocking a UAV's GNSS and communications capabilities. This **combined jam and blinding capability** could also give the weapon a secondary role against other GPS- and EO-reliant platforms. Battery and power figures claim three hours of continuous life and 36 months on standby before needing a recharge.

At a reported 4.5 kg in weight, with rifle-like dimensions and a stock based on the MP-514K air rifle, it appears to be simple to use, offering mobile and light forces a new ability to counter proliferating UAVs, which can be hard to engage with more conventional firearms.

<https://www.janes.com/article/82990/russian-rex-1-counter-uav-system-breaks-cover-on-exercise>

Verizon Uses Drones to Maintain "Business as Usual" – and to Move IoT Forward

Miriam McNabbon: September 17, 2018

For Chris Desmond, Principal Engineer at Verizon Network, "Business as Usual" has a very specific meaning. The communications giant recognizes that the network is working optimally



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when customers don't even notice it.

Verizon signed an agreement with NASA to explore using its cell towers and communications network as part of an Unmanned Traffic Management system in 2015. In October of 2016, the company [announced](#) their Airborne LTE Operations initiative to help promote wireless connectivity in flight. They have made multiple strategic investments and partnerships including the acquisition of the [Skyward](#) drone management platform in 2017 and an investment in [PrecisionHawk](#).

Verizon is also using drones to keep their core business going conducting cell tower inspections. They use drones to survey large venues for major events or concerts. And drones are becoming critical in disaster response when communications networks are most vulnerable.

Cell tower inspections were the first and most obvious use of drones. But use cases quickly expanded to save time and legwork. Desmond has examples of using drones to survey large venues: like the Circuit of the Americas Formula 1 racing site which included 14 different locations. "We utilized drones to survey the venue in a single day – vs. the weeks or even months that it would take to do the job on foot." There was the outdoor Taylor Swift concert where the grass was still being grown so the venue wouldn't allow anyone to walk on it. "I'm working with various departments to evaluate using drones to prep for SuperBowl 53 in Atlanta – walking up and down the stairs and the bleachers is time intensive, so we're looking forward to the opportunity to use drones."



More and more, says Desmond, drones are being used in disaster recovery scenarios. "In the Carolinas during Hurricane Matthew, we had one cell tower in a farm field surrounded by water. We used a drone to survey the tower's physical aspects. The drone flew in from .25 to .5 mile away and streamed video to the command center. "The camera was so precise we could see the exhaust flap from the generator wasn't moving. We were able to contract with the National Guard to refuel the generator and get the site back up and running within an hour."

The speed of evaluation and response **is critical** in disaster recovery – **and it can only be achieved with drones**. In Hurricane Harvey, Verizon used two flight crews to survey 10 cell site locations in a single day which would have been impossible with climbers and riggers.

<https://dronelife.com/2018/09/17/verizon-uses-drones-to-maintain-business-as-usual/>



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Defense Contractors Invest in Small Satellites Jane Edwardson September 17, 2018

Some defense companies such as [Raytheon](#), [Lockheed Martin](#) and [Boeing](#) have made investments in startups that develop small satellites as the Pentagon and intelligence agencies work to counter space security threats through the use of [Cubesats](#), the Washington Post [reported Sunday](#).

Raytheon [announced](#) a partnership with Herndon, Va.-based satellite firm [HawkEye 360](#) on Monday, Sept. 10, to develop geospatial systems in support of the government's situational awareness missions.



"We operate similar to a venture capital or private equity firm, but our focus is on the 'solution' rather than on financial returns," said [Dave Wajsgras](#), president of Raytheon's intelligence, information and services business unit.

"With the requirements that commercial and government customers have around the world, there is a need to provide them at lower cost and provide them in a different way," added Wajsgras, a four-time [Wash 100 awardee](#).

Boeing's venture capital arm [HorizonX](#) [invested](#) in Denver-based [BridgeSat](#) to help the latter field an optical platform for space-based connectivity services, while Lockheed expanded its support to nanosatellite firm [Terran Orbital](#) through a new [funding round in August](#).

<http://blog.executivebiz.com/2018/09/defense-contractors-invest-in-small-satellites-raytheons-dave-wajsgras-quoted/>

NASA seeks industry partners for its new urban air mobility challenge September 17,



2018 Philip Butterworth-Hayes UAS traffic management news, Urban air mobility

The Federal Business Opportunities website reports that NASA's Aeronautics Research Mission Directorate vision is to revolutionize mobility within metropolitan areas by enabling a safe, efficient, convenient, affordable and accessible air transport system for Urban Air Mobility (UAM).

NASA is planning to host a series of UAM challenges to promote public confidence in UAM safety and facilitate community-wide learning while [capturing the public's imagination](#). NASA anticipates hosting the first of these Grand Challenges, GC-1, in late 2020. The GC-1 will challenge community participants to address UAM safety and integration barriers. The GC-1 would provide participants the opportunity to demonstrate fieldable systems focusing on



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demonstrating the safety and integration of UAM vehicles and Air Traffic Management (ATM) systems.

To help communicate the goals for the GC-1, the role that NASA will play, and the expectations from participating partners, NASA will be hosting an **Industry Day** on November 1 & 2, 2018 in Pike Place Market Area, Seattle, Washington. <https://www.unmannedairspace.info/urban-air-mobility/nasa-seeks-industry-partners-new-urban-air-mobility-challenge/>

Farmers affected by Hurricane Florence offered discounted technology to assess damage AGRICULTURE NEWS TECHNOLOGY ALEX DOUGLAS SEPTEMBER 17, 2018



Aerobotics, based in Cape Town, South Africa, has made its tree crop scouting technology available to farmers affected by Hurricane Florence for free or at a discounted rate.

The Aerobotics team has said it understands the pain, stress and damage weather can cause farmers and hopes its technology can be used to help farmers through these difficult times. James Paterson, CEO, said: "While we are a profit-making business, many of us are farmers or grew up in farming communities and want to help farmers suffering from Hurricane Florence."

He added: "Depending on the size of the farm and circumstances, we can offer farmers our products and technology **for free** or for very discounted rates to help them assess the damage done to their tree farms and get back up and running as quickly as possible." Andrew Burdock, COO at Aerobotics, said: "Our hope is that we can use the technology (that is monitoring over 6m trees around the world) in the areas that are affected by Hurricane Florence."

The company is asking all interested farmers to make contact through its website to field inquires, get in contact with the farmers and recommend assistance that can be offered now and when Hurricane Florence finally clears the region.

http://www.commercialdroneprofessional.com/farmers-affected-by-hurricane-florence-offered-discounted-technology-to-assess-damage/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-275327-Commercial+Drone+Professional+DNA+-+2018-09-17



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Insitu Unveils New Extended-Range Drone 9/17/2018 Mandy Mayfield



NATIONAL HARBOR, Md. — Insitu, a subsidiary of the Boeing Co., unveiled its latest unmanned aerial system Sept. 17 at a gathering of Air Force and industry leaders. The Integrator Extended Range is a new drone that is “acoustically and visually **undetectable** at tactical altitudes,” Esina Alic, Insitu's president and CEO, said at the Air Force

Association’s annual Air, Space and Cyber Conference.

The “theater-range platform” weighs 145 pounds, she said. The system can fly **200 nautical miles** and stay on station for **10 hours**, or travel 300 nautical miles and remain on station for six hours, she noted. Don Williamson, vice president of Insitu Defense, highlighted the Integrator’s **range**. Medium-altitude drones have traditionally been limited to 50 to 70 nautical miles, he said. The aircraft also comes at a significantly reduced cost compared to current unmanned systems that are in operation, he said.

When asked what role the aircraft could play for the U.S. military, Williamson touted the Integrator’s **vertical take-off** capabilities.

<http://www.nationaldefensemagazine.org/articles/2018/9/17/insitu-unveils-newest-unmanned-aircraft>

Wiltshire-based autonomous sub-orbital space flight project wants to take off

BUSINESS HEADLINE NEWS INNOVATION TECHNOLOGY ALEX DOUGLAS SEPTEMBER 18, 2018



Starting five years ago, the EARL Project is a rocket-powered, autonomously-piloted aerodynamic vehicle of lifting body form which aims to carry out third-party scientific experiments. The vehicle has been designed to complete micro-gravity experiments, astronomy and Earth observation into sub-orbital space.

The project is owned and managed by Spacefleet, and the brains behind the idea and managing director of the company, Dr Wright, has invested just his own money so far and is hoping further investment will help the EARL Project take off.

With a partner in Romania for help with design, construction and testing, the EARL-D4 took to the skies for the first time in May this year. At a military range in east Romania the vehicle was



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stable in flight and followed its programmed autonomous flight path as expected. The intended maximum height is 150km, with payloads of 10 kg.

The vehicle is **re-usable**, and can be piloted automatically back to the take-off point at the end of its mission or to a different location within its range. This contrasts with the currently-used sounding rockets, where the booster is single-use, and the payload has to be returned by sending a recovery team by helicopter.

Wright said: "I think that we will be able to make the **breakthrough** to re-usable sub-orbital flight because there are cost savings in both the re-usability of the vehicle and in the elimination of the recovery operation, for atmospheric and sub-orbital payloads, and the overall development cost will be low enough to make it worthwhile, because no new technology is needed. http://www.commercialdroneprofessional.com/wiltshire-based-autonomous-sub-orbital-space-flight-project-wants-to-take-off/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-275444-Commercial+Drone+Professional+DNA++2018-09-18

WingtraOne to help build Europe's first testing ground for high-speed vacuum travel NEWS SUPPLIERS ALEX DOUGLAS SEPTEMBER 18, 2018



Land in Switzerland used for the testing site needs to be surveyed before it can be used, so fellow-Swiss company Wingtra suggested its VTOL drone. The 3km long and 3m wide stretch of land will be used to build the a vacuum tube that is to be the testing site for ultra-high-speed transportation technology.

The project has been described as the European answer to the American Hyperloop of the SpaceX and Elon Musk fame.

EuroTube has chosen the stretch of land in the Valais region of Switzerland as its candidate location. Sascha Mark, the technical director at the project, reached out to Wingtra in early May, and a partnership was quickly formed. "We were looking at surveying solutions that can provide the dataset required for construction site quickly without compromising on the accuracy."

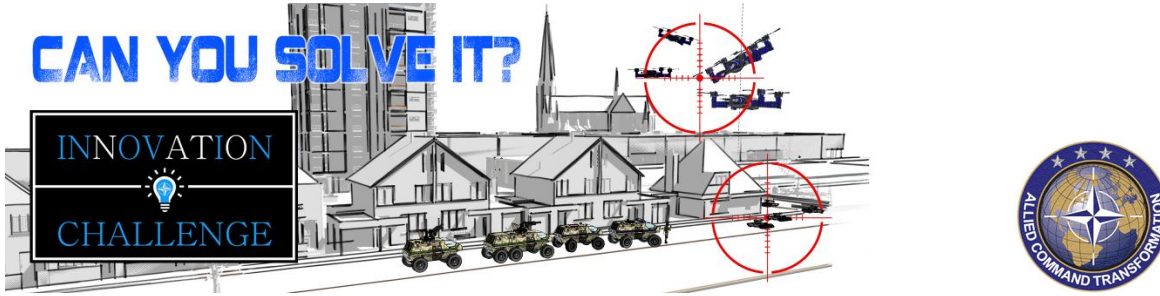
"We are pleased to say that the dataset gathered by the WingtraOne was precise enough to let the engineering office begin planning construction. The generated point cloud has a vertical accuracy of 10 cm and horizontal accuracy of 3 cm. "We are now well on track on our timeline to begin construction," says Mark. <http://www.commercialdroneprofessional.com/wingtraone-to-help->



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[build-europes-first-testing-ground-for-high-speed-vacuum-travel/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-275444-Commercial+Drone+Professional+DNA+-+2018-09-18](https://www.axcelinnovation.com/build-europes-first-testing-ground-for-high-speed-vacuum-travel/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-275444-Commercial+Drone+Professional+DNA+-+2018-09-18)

NATO Innovation Challenge



Protecting the troops and populations against hostile unmanned systems is a rising concern for NATO. This is your opportunity to contribute to their security! Propose your innovative solutions in the field of

Countering Air and Ground Unmanned Systems

and compete for valuable prizes and stage time at NATO-wide events. [Watch Video](#)

Abstracts due by September 30

Finalist names will be released by October 9. The final competition will be November 12 in Berlin for those who can fly there - or make presentations on-line. <https://innovationhub-act.org/nato-innovation-challenge-20182>

19Sep18

Drone Technology To Track Wanderers With Autism George Diaz, Orlando Sentinel/TNS | September 18, 2018



ORLANDO, Fla. — Alzheimer’s disease and autism will face a formidable foe in Orange County: A drone that will track people with the conditions if they wander away from home or a facility.

A pilot program announced this month will put \$75,000 of state money to launch the initiative, spearheaded by state



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Sen. Linda Stewart. "This technology will help find people much faster than by foot, by car, even a motorcycle," said Stewart, who led the charge in Tallahassee to get the program funded. She decided to push for the program after learning that a **half-million people with Alzheimer's** were reported **missing** in Florida last year.

The technology is provided by Project Lifesaver, which will provide tracking devices for those with cognitive disorders. The device can be placed on a person's foot or ankle. Working with 911, deputies will be able to find the person using a frequency emitted from the device.

<https://www.disabilityscoop.com/2018/09/18/drone-track-wanderers-autism/25500/>

FAA Completes Nationwide Implementation of Drone Tracking System Nichols

Martin September 18, 2018 News, Technology

The Federal Aviation Administration has activated the final component of its nationwide system designed to authorize and track drones in real time FCW [reported Monday](#).



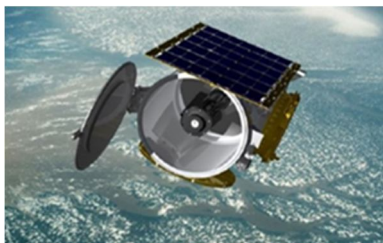
The North Central region coverage of the *Low Altitude Authorization and Notification Capability* is now operational, completing the activation of all six components that collectively cover 288 air traffic control stations.

Dan Elwell, administrator of the FAA, said in April that the agency is implementing the LAANC nationwide in a move to regulate the increasing number of private drones in the U.S.

The system supports FAA's *UAS Data Exchange* effort, a public-private partnership that facilitates information sharing to support the integration of unmanned aircraft systems into U.S. airspace. <http://www.executivegov.com/2018/09/faa-completes-nationwide-implementation-of-drone-tracking-system/>

Tiny satellite work ramps up Raytheon

Roughly the size of a five-gallon paint bucket, they weigh about 50 pounds; tiny compared to large weather or surveillance satellites, which can weigh as much as a school bus and cost up to \$1 billion.



Raytheon has adapted its assembly lines to build these detailed satellites at less than one hundredth of the cost of their larger kin.

The market for small, "disposable" satellites is estimated to be



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worth **\$7 billion** over the next several years. And while the product is new, designers were able to draw on Raytheon's experience in building satellite sensors and their control systems.

The satellites are being built by Raytheon's Missile Systems business. https://www.raytheon.com/news/feature/small_satellites

Send in the drones: thousands of UAVs to be deployed to help following

Hurricane Florence September 17, 2018 Feilidh Dwyer



Hurricane Florence has unleashed its wrath on the Atlantic coast, smashing North and South Carolina, killing at least 18 people, knocking out power, damaging 750,000 homes and otherwise causing chaos.

[Aviation International News](#) spoke with Airbus Aerial President Jesse Kallman before the storm who told them: "There will be thousands of drone pilots out flying for this event for sure."



At least three quarters of a million homes were affected by the storm as well as 40,000 vehicles. According to reportage from [Fortune.com](#), at least **53 drone teams with more than 100 drone operators** have been assembled to assess the extent of damages. Some of these teams work on behalf of power companies or Automobile Associations. One company based in North Carolina, PrecisionHawk, is expected to deploy hundreds of pilots from its drone network. This network provides data to EagleView which supplies data analytics and aerial images for the government, insurance and commercial sectors.

Similarly, drones help power or lines company to quickly identify where the power outages have occurred, meaning they can more quickly deploy their technicians to make the necessary repairs and get power back. <https://www.wetalkuav.com/thousands-of-uavs-deployed-following-hurricane-florence/>

Asteria Aerospace Launches Genesis, An IoT Platform to Connect Drones to

Command Centers September 18, 2018 News

Asteria Aerospace, a manufacturer of surveillance & security drones in India, today announced the launch of GenesisTM, an industrial IoT network for drones. It is a software platform for



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organizations to manage fleets of drones in surveillance & security operations.

It allows authenticated users to login from any device, anywhere, and view video, images, sensor and telemetry data from **multiple drones in real-time**. The data is stored and managed on the platform for search and analysis.

Genesis makes it possible for a police force to have several drones deployed over a city for event security and the live video feed from all the drones to be broadcast to a central command center. Decisions made at the command center can be relayed to the drone operators or quick response teams through the same platform, ensuring that everyone shares the same picture of the operation. http://uasweekly.com/2018/09/18/asteria-aerospace-launches-genesis-an-iot-platform-to-connect-drones-to-command-centers/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_newsletter_2018_09_18&utm_term=2018-09-19

Global UAV Receives Authorization for Beyond Visual Line of Site Drone Flight

Testing September 17, 2018 News



Global UAV Technologies Ltd. is pleased to announce that Transport Canada has authorized Global UAV's subsidiary Pioneer Aerial Surveys Ltd. to conduct **Beyond Visual Line of Sight** (BVLOS) operations with the NOVAerial Procyon 800E at the Unmanned Aerial Systems test range located in Foremost, Alberta.

Pioneer Aerial has been issued a Special Flight Operating Certificate ("SFOC") which allows BVLOS flights at the Foremost UAV Range in Alberta, Canada. The SFOC allows the company to demonstrate delivery of payloads with the Procyon 800E in addition to research and development flights such as radio signal strength testing. The BVLOS flight test plans will align the company to apply for Transport Canada pilot project approval for future flights and operations in unrestricted airspace. http://uasweekly.com/2018/09/17/global-uav-receives-authorization-for-beyond-visual-line-of-site-drone-flight-testing/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_newsletter_2018_09_18&utm_term=2018-09-18



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Sensofusion to Unveil Next Generation CUAS System AIRFENCE September 19, 2018

Counter UAS



AIRFENCE 6.0 is a solution for end-users seeking a counter-UAS technology to automatically detect, locate, track, and defeat unwanted drones regardless of what frequency band they hop to when counter-attacking.

Sensofusion, with U.S. headquarters in New York City and international headquarters in Helsinki is the creator of AIRFENCE, a countermeasure technology designed to take over unmanned aircraft system controls as well as **locate operators**. The company currently partners with the European Union, U.S. Marine Corps., NATO, the FAA, and the Nevada Institute of Autonomous Systems.

http://uasweekly.com/2018/09/19/sensofusion-to-unveil-next-generation-cuas-system-airfence-hosting-exclusive-demo-this-fall/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_newsletter_2018_09_19&utm_term=2018-09-20

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State Farm Granted Key Drone Permissions for Florence Damage Assessment Betsy

Lillian September 19, 2018



Thomas Jones, a program manager with MAAP, launches a drone during tests with State Farm

U.S. insurer State Farm has been granted a Federal Aviation Administration waiver for unmanned aircraft system operations to assess damage in communities impacted by Hurricane Florence.

The waiver allows both **flights over people and flights beyond the operator's visual line of sight**. These provisions are **approved over four states** impacted by the hurricane.

The insurance company has been collaborating with the Virginia Tech Mid-Atlantic Aviation Partnership (MAAP) as part of the FAA's [UAS Integration Pilot Program](#). Through research collaboration with MAAP, State Farm determined that flying the eBee fixed-wing drone would reduce the risk of damage to people and property. Manufactured by senseFly, the drone captures high-resolution imagery.

"State Farm needs to quickly assess damage after significant weather events," says Robert Yi, senior vice president of State Farm. "Drone technology provides us with the capability to quickly



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deploy over a catastrophe site and assess damage from the air. This also allows us to place our claims team on the ground and evaluate uninhabitable insured property.”

“This is a pivotal moment that demonstrates the value of a risk-based safety case development process,” adds Mark Blanks, director of MAAP. “Drone technology has tremendous potential to serve the public, but before we can harness that capability, we need to demonstrate conclusively that ambitious operations can be done safely. This waiver – and the volume of research that backs it up – shows that this approach works.” https://unmanned-aerial.com/state-farm-granted-key-drone-permissions-for-florence-damage-assessment?utm_medium=email&utm_source=LNH+09-20-2018&utm_campaign=UAO+Latest+News+Headlines

Will flying cars take off? Japan’s government hopes so Yuri Kageyama | AP September 18



In this Saturday, June 3, 2017, file photo, Tsubasa Nakamura, project leader of Cartivator, third from left, watches the flight of the test model of the flying car on a former school ground in Toyota, central Japan.

The Japanese government has started a “flying car” project, bringing together more than a dozen companies, including

All Nippon Airways, electronics company NEC, Toyota-backed startup Cartivator and Uber, the ride-hailing service. Toyota and its group companies have also invested 42.5 million yen (\$375,000) in a Japanese startup, Cartivator, that is working on a flying car.

TOKYO — Electric drones booked through smartphones pick people up from office rooftops, shortening travel time by hours, reducing the need for parking and clearing smog from the air.

This vision of the future is driving the Japanese government’s “flying car” project. Major carrier All Nippon Airways, electronics company NEC Corp. and more than a dozen other companies and academic experts hope to have a **road map ready by the year’s end.**

“This is such a totally new sector Japan has a good chance for not falling behind,” said Fumiaki Ebihara, the government official in charge of the project.

Nobody believes people are going to be zipping around in flying cars any time soon. Many hurdles remain, such as battery life, the need for regulations and, of course, safety concerns. But dozens of similar projects are popping up around the world.

<https://www.washingtonpost.com/business/technology/will-flying-cars-take-off-japans-government->



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