



UAS and SmallSat Weekly News

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4Aug18

The University of Central Lancashire Unveils Graphene Skinned Unmanned Aerial Vehicle [August 3, 2018 News](#)



The University of Central Lancashire (UCLan) in the UK has revealed a graphene-skinned unmanned aerial vehicle (UAV) named Juno. The three-and-a-half-metre wide vehicle is equipped with graphene batteries and 3D printed parts and is **the world's first graphene skinned aircraft**.

Juno was developed as part of a long-term strategic partnership between UCLan and various organizations, which plan to open a **£32m** EIC facility in February next year. Using graphene to build aircraft parts can help the industry to address various challenges such as **lowering weight** to increase range and payload, overcoming lightning strike and protecting aircraft skins against ice build-up.

Previously, representatives from UCLan conducted the world's first flight of a graphene skinned wing, as well as launched a specially designed graphene-enhanced capsule into near space using high-altitude balloons. http://uasweekly.com/2018/08/03/the-university-of-central-lancashire-unveils-graphene-skinned-unmanned-aerial-vehicle/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_newsletter_2018_08_03&utm_term=2018-08-03

Komatsu Partners with Propeller to Bring Drone Analytics Solutions to The Construction Industry [August 3, 2018 Mapping and Surveying | News](#)



With drones becoming an increasingly common worksite tool, Komatsu has identified aerial mapping and analytics as a key component of their Smart Construction initiative—a range of integrated hardware and software products designed for each phase of construction.

Komatsu America Corp. spent several years testing various commercial drone mapping and analytics products in North America. In [Propeller](#), Komatsu found a product well-suited to meet the needs of construction operations.



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Propeller processes thousands of images in hours, and delivers the results as a **cloud-based 3D model** to the user's desktop or tablet. From there, analysis tools let users perform height, volume and slope calculations, and measure changes over time to confirm that a project is on track.

Now available through a network of distributors across the US, Komatsu Equipment Company, a distributor in Salt Lake City, was among the first to roll out Propeller solutions to Komatsu customers. <http://uasweekly.com/2018/08/03/komatsu-partners-with-propeller-to-bring-drone-analytics-solutions-to-the-construction-industry/>

China Surveils Citizens Using Drones That Look Like Birds August 3, 2018 Mizuki Hisaka

China employs cutting-edge surveillance technologies to track their 1.4 billion citizens. The gathered data is reportedly being used to assign a "**social credit score**" on each Chinese citizen. One of the newer surveillance tools that China has deployed is a drone that resembles a bird as part of a project code-named "Dove."



The drone looks like birds and even flaps its "wings" to get around. Researchers claim that it mimics a dove at around 90 percent accuracy. Instead of a traditional drone, this bird drone dives, gains altitude, and accelerates just like a regular bird would, according to [Business Insider](#).

Each drone weighs around 0.44 pounds and has a 19.7-inch wingspan. It can travel around 24.9 miles per hour for 30 minutes at a time. The drones have a camera, GPS, flight control system, and satellite communication systems. Experts warn that the bird drones pose an even greater risk to privacy than ever before.

This bird technology comes at the heels of some of the most sophisticated surveillance systems ever implemented. China already uses facial recognition surveillance at events, and biometrics are used when people want to buy train tickets. Police wear smart glasses that have facial recognition software. <https://www.inquisitr.com/5014733/china-surveillances-citizens-using-drones-that-look-like-birds/>

5Aug18

Venezuelan President Targeted by Drone Attack, Officials Say Ana Vanessa

Herrero and Nicholas Casey Aug. 4, 2018



CARACAS, Venezuela — A drone attack caused pandemonium at a military ceremony where President Nicolás Maduro of Venezuela was speaking on Saturday, sending National Guard troops scurrying in what administration officials called an assassination attempt. It was an attack that seemed **scripted for Hollywood**: Off-camera explosions. Low-flying drones exploding midair. The president and first lady ducking for cover. Thousands of soldiers in a military parade suddenly fleeing in a stampede that was broadcast to the country live.



Venezuelan soldiers scattered after the explosion.

Jorge Rodríguez, the communications minister, said the attackers had used “**several flying devices**” that were detonated near where the president was standing.

During the president’s speech, which was broadcast live on state television, the camera began to shake. Mr. Maduro then looked into the air as his wife, Cilia Flores, flinched and reached for another official to brace herself. The video feed was interrupted, but Mr. Maduro could be heard continuing to talk as voices in the background yelled for people to flee. The video feed then showed figures dressed in black breaking through a barrier from the sidelines of a wide street where hundreds of uniformed guardsmen were arrayed in formation. The figures in black ran toward the guardsmen, who abruptly fled in panic. The transmission then cut off.

Mr. Maduro, addressing the nation just before 9 p.m., blamed right-wing elements in Venezuela and Colombia for the attack. <https://www.nytimes.com/2018/08/04/world/americas/venezuelan-president-targeted-in-attack-attempt-minister-says.html>

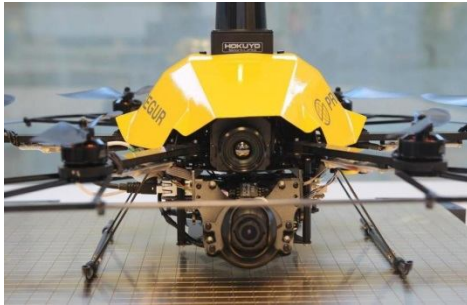


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6Aug18

Indoor surveillance drones on their way to a company near you? August 5, 2018

Feilidh Dwyer



Two tech companies have teamed up to build a **fully automated indoor security drone system** purposed with identifying security threats or breaches.

[Skysense](#), a German-based drone infrastructure and automation company, have partnered with Spanish-based Geographic Information System (GIS) ICT company, [Avansig](#). Together these companies have developed a drone product for massive multinational security firm, Prosegur.

The drones are designed to follow preprogrammed patrol route. While flying, they broadcast a live-feed of what they are seeing, and if something is amiss, they create an alert for whoever is monitoring the feed. The drones automatically return to a fast-charging station when their batteries are low.

Patrolling security drones are cheaper than traditional human guards. Once a company has made the initial outlay for the drone, the technology can operate almost constantly. **The rapid recharging** functionality is the real game-changer. CCTV cameras could be used in concert with the drone patrols, creating fewer blind spots. One can imagine many applications for these UAVs. They are particularly useful for logistics or warehousing companies, airports or military facilities. <https://www.wetalkuav.com/indoor-surveillance-drones-on-their-way-to-premises-near-you/>

DARPA's Fast Lightweight Autonomy program tests the scouting software of tomorrow's wars [Kelsey Atherton](#)



Using a lightweight sensor package and specially written algorithms, this drone identified an opening in a building and then navigated through it.

Every map is an outdated map. Buildings change, people relocate, and what was accurate a decade ago may mean nothing to someone on patrol today. Which is one reason the Defense Advanced Research Projects Agency is pursuing Fast Lightweight Autonomy, a program designed to teach drones to



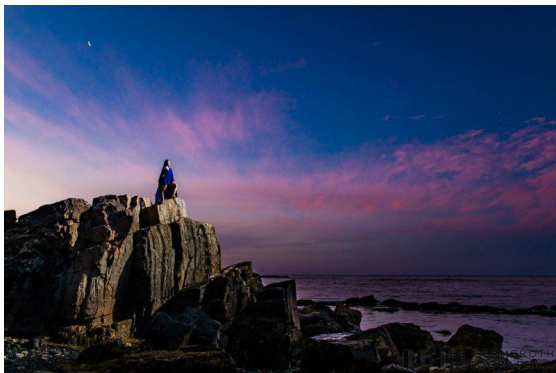
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scout and map unfamiliar locations, without the help of GPS or external guidance tools and transmit that information back to humans following behind.

If DARPA's program results in workable code and sensors, future missions equipped with quadcopters could let the robots scout a contested area before putting any humans at risk. And that area could include dense woods, civilian-lined streets in an area that's seen some insurgent action, or even shelled-out buildings that may be hiding snipers or other traps. The robot explores and informs, and then the humans can follow afterwards, with fresh information loaded onto their tablets and guiding their movements.

Rescue workers could use drones based on this software to see if a damaged building is safe enough to send rescuers into, or to see if there are even people alive inside who might need rescuing. Drones that can fly quickly through forests could seek out lost hikers, shifting the human energy from search to rescue. <https://www.c4isrnet.com/unmanned/2018/07/30/darpas-fast-lightweight-autonomy-program-tests-the-scouting-software-of-tomorrows-wars/>

Shooting a Sunrise Portrait with a Drone-Mounted Flash JUL 31, 2018 LEE GERMEROTH



The whole point of this shoot was to light the impossible. While location scouting I found this rock face with the eastern sky as the background. I first thought it would just be an amazing location for an engaged couple or something that I usually shoot. But when I realized that the sun would rise right behind the cliff, I knew a sunrise session was in order. Rather than traditional natural lighting with a silhouetted subject, I wanted to light the model so she would stand out from the background.

The only way to be able to light the model from this position would be with a light that could fly so we rigged up a [Canon 600EX Speedlite](#) flash under a DJI Phantom 3.



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After I posed our model Michelle (who is also the 2018 Miss NH), I got into my shooting position and launched the drone. Once the drone was in the air, I started shooting away, creating the compositions that had been in my mind for such a long time. A lot had to come together for the shoot, but I am very happy with the results. It was exactly the vision I had in my mind. <https://petapixel.com/2018/07/31/shooting-a-sunrise-portrait-with-a-drone-mounted-flash/>

The crop-spraying drones that go where tractors can't Chris Baraniuk Technology of Business reporter 3 August 2018



Something unusual is happening on farms in the small Central American nation of El Salvador. Many fields, mainly of sugar cane, are now being tended by drones.

Large unmanned hexacopters fitted with 20-litre tanks for carrying fertilizer or pesticides follow pre-mapped routes and spray crops accordingly.

This isn't a case of new tech replacing old farm equipment - some of these fields are being **sprayed for the very first time**. In a country where access to fields is often difficult for tractors and even planes, drones are showing great potential. Mr Nawratil thinks yields could improve by "tens of percent".



Drones are touted as useful flying farmhands because they can improve the precision with which fertilizers, pesticides or fungicides are applied. This is due to their ability to spray specific volumes on GPS-defined routes through a field.

Salvador's terrain can be difficult for traditional farm machinery to navigate



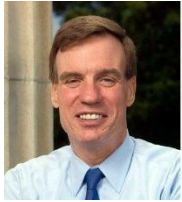
This improved efficiency could go some way to allaying fears about the environmental damage that overuse of pesticides and fertilizers can cause.

<https://www.bbc.co.uk/news/business-45020853>



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Senator doubles Virginia state funding for drone integration programs August 5, 2018 Philip Butterworth-Hayes UAS traffic management news



The Drive (<http://www.thedrive.com/tech/22601/virginia-senator-doubles-state-drone-funding-to-6m-to-bolster-uas-integration-program>) reports that US Senator Mark Warner has introduced an amendment to Virginia's "minibus" spending package, essentially doubling the state's funding for drone systems from **\$3 million to \$6 million**, in an effort to bolster the region's involvement in the UAS Integration Pilot Program.

"The program, unfortunately, doesn't include funding from the federal government, and hence, relies on funding from participating states and the drone test sites within those states to pay for research and development," says the news service. "Sen. Warner's efforts, if passed into law, would match each dollar spent by a client willing to use Virginia's UAS test site with state funding from the above \$6 million."

"This amendment will ensure we continue supporting advancements in the safe and responsible integration of unmanned systems in our airspace," said Sen. Warner.

<https://www.unmannedairspace.info/uncategorized/senator-doubles-virginia-state-funding-drone-integration-programmes/>

7Aug18

NASA bolsters smallsat science programs Jeff Foust August 6, 2018



Thomas Zurbuchen, NASA gives the keynote address Aug. 6 at the Small Satellite Conference at Utah State University in Logan, Utah.

LOGAN, Utah — NASA is responding to the growing interest in, and capabilities of, small satellites for science applications with an initiative that will spend **\$100 million a year** on a series of projects.

In a speech at the AIAA/Utah State University Conference on Small Satellites here Aug. 6, Thomas Zurbuchen, NASA associate administrator for science, outlined that initiative, which includes efforts ranging from a call for proposals for technology demonstration missions to new launch opportunities for smallsats.. "We're going to realize the importance of small satellites not just as a platform but as an enabler to do science that is **otherwise not achievable**."



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Those efforts are part of an overarching initiative within NASA's Science Mission Directorate that will spend \$100 million on smallsat projects, starting in the current fiscal year. That figure was finalized only about 10 days ago, he said, with the final approval of the overall operating plan for the agency for this year. <https://spacenews.com/nasa-bolsters-smallsat-science-programs/>

Goldman, Lockheed Martin Back Company That Makes Tiny Satellites [Austin Weinstein](#) August 6, 2018

The two firms took part in a **\$36 million** funding round for Terran Orbital Corp. The company, which has worked with the Pentagon and NASA, manufactures nanosatellites, some of which are small enough to fit in your hand.

With the new cash, Terran Orbital said it will hire staff and buy more equipment for a 40,000-square-foot design and production facility. Satellites have become cheaper and smaller in recent years, and launch costs have fallen, sparking [an explosion of new uses](#). The changes are upending the industry, and Terran is trying to take advantage.

It's the second Terran investment for Lockheed's venture capital arm, which [took](#) a stake in 2017. After that first deal, the U.S. government purchased some Terran's work through a Lockheed contract. <https://www.bloomberg.com/news/articles/2018-08-06/goldman-lockheed-martin-back-company-that-makes-tiny-satellites>

Worries Mount over Drone Safety after Venezuela Attack Andy Pasztor and Dustin Volz Aug. 6, 2018



Néstor Reverol, Venezuela's interior minister, at a news conference Sunday, a day after a drone attack in the country.

Drone industry and law-enforcement officials are struggling to find common ground over expanding flights and protecting public safety, a debate thrust into the public spotlight by a reported assassination attempt on

Venezuelan President Nicolás Maduro.

Saturday's attack with [unmanned aircraft in Caracas](#) was a reminder for the drone industry and U.S. government officials over the potential security threats even readily available commercial drones can pose.



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Venezuelan authorities said a pair of explosive-laden drones carrying a total of about 4 pounds of plastic explosives were part of an unsuccessful assassination attempt during an outdoor ceremony in Caracas, with one of the vehicles detonating after **government jamming devices knocked it off course**. Mr. Maduro was unharmed, but seven soldiers were injured.

The incident is believed to be "**the first time**, outside of a war zone, that some group has weaponized a drone" to attempt an attack, said London-based consultant Pete Cooper. It could serve as a catalyst for "other groups that may have considered, but then dismissed" such an attack, and now "may again pick up" the idea. <https://www.wsj.com/articles/worries-mount-over-drone-safety-after-venezuela-attack-1533601121?tesla=y>

Insurers Are Speeding Up Claims. Their Worry: More Mistakes Leslie Scism and Nicole Friedman Aug. 6, 2018



Flooding caused extensive damage across Houston when Hurricane Harvey struck late last August.

Property insurers are relying on more **drones, small aircraft and artificial intelligence** to accelerate claims during 2018's hurricane season. There are signs this push for speed could pose new headaches for the industry.

Last year marked the first widespread use of aerial technology to pinpoint damages and evaluate losses quickly as insurers scrambled to keep up with [back-to-back hurricanes](#) and wildfires. But some insurers have reopened claims from that period because initial repair estimates turned out to be too low, according to executives and regulators.

Insurers are testing a number of new tools as they try to speed up what still can be a clunky, time-consuming claims process. That includes everything from drones and small airplanes to assess damage without the help of an on-site adjuster to smartphone apps that let consumers submit their own damage photos. Some insurers are identifying property damage before policyholders even reach out to report a claim.

Several large insurers said they are using flights, **drones and aerial imagery more frequently** in 2018. [Allstate](#) Corp. settled 16,500 claims this way in the first half of this year, compared with 12,600 for all of 2017. <https://www.wsj.com/articles/insurers-are-speeding-up-claims-their-worry-more-mistakes-1533553201?tesla=y>



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AirMap UTM Services Deployed in Czech Republic 06 Aug 2018 Mike Rees



[AirMap](#), an airspace management platform for drones, has announced that its UTM (unmanned traffic management) services are being deployed by Air Navigation Services of the Czech Republic (ANS CR) to deliver situation awareness and authorization capabilities to the country's growing community of drone operators.

ANS CR is deploying AirMap UTM to manage authorizations for drone **flights in the controlled airspace** around Václav Havel Airport Prague. Operators can view up-to-date airspace conditions, advisories, and regulatory information; create flight plans; and very soon will also be able to request authorization to fly in controlled airspace.

ANS CR and AirMap are working with local partner UpVision to drive local awareness of UTM capabilities. UpVision is providing customization of the AirMap for Drones application. The Czech Republic-based company will also provide operators with technical support for UTM services.

This is AirMap's **second** nationwide adoption in Europe. Previously, Swiss aviation authority skyguide deployed AirMap as part of Europe's first national drone traffic management system. AirMap also powers UTM services in the United States, New Zealand, and Japan.

http://www.unmannedsystemstechnology.com/2018/08/airmap-unmanned-traffic-management-services-deployed-in-czech-republic/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=b73d9004c9-eBrief_2018_Aug_07&utm_medium=email&utm_term=0_6fc3c01e8d-b73d9004c9-111778317

The Next Generation of Safe And Inexpensive Humanitarian Airdrops August 6, 2018



Wings for Aid is a foundation and DLR is a non-profit association, and both work to identify how and where the humanitarian application of drone technology can have a positive societal impact.

In June 2018, WFP, DLR and Wings for Aid tested the delivery



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concept, which uses a specially-developed disposable cardboard box, dropped directly from the aircraft at its destination. The boxes are inexpensive to manufacture and biodegradable. Once the box is released, its side surfaces open to slow down and stabilize the fall.

Flights of the unmanned helicopter took place in various regions of the Dominican Republic that have been affected by flooding in the past, cutting off the supply route to local communities. Researchers simulated an emergency scenario: the unmanned helicopter flew automatically over the salt lake Enriquillo over a distance of six kilometres. The aircraft was equipped with 20 kilograms of food supplies, including High Energy Biscuits and the dietary supplement Progresina, which were deployed safely and without damage to the other side of the lake.

The flight tests were a great success for the project team: "We were able to carry out all flight missions successfully and safely," says Dauer. "The feedback from the population and the humanitarian aid organizations involved was very positive."

http://uasweekly.com/2018/08/06/the-next-generation-of-safe-and-inexpensive-humanitarian-aidrops/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_newsletter_2018_08_07&utm_term=2018-08-08

8Aug18

Airbus Spy Drone Stretches Flight-Endurance Record to 25 Days Christopher Jasper

August 8, 2018



Floating almost motionless at an altitude of **70,000 feet**, [Airbus SE](#)'s Zephyr spy drone has **extended the record** for the longest flight within the Earth's atmosphere **to 25 days**, two-thirds more than the previous best.

The first production version of the solar-powered pseudo-satellite spent more than three weeks in the stratosphere on its maiden trip after taking off from Arizona on July 11. The flight broke the previous endurance record of 14 days set by a prototype Zephyr in 2015 and was aimed at



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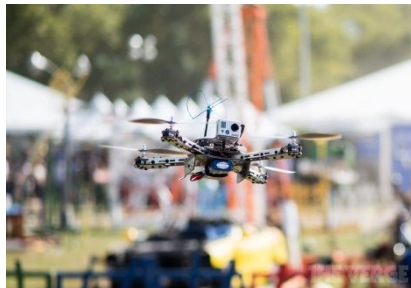
establishing the drone's credentials as a less costly, more nimble alternative to conventional satellites. The craft, which has an 82-foot wingspan but weighs 165 pounds, is one of two ordered by Britain's defense ministry and was built at Farnborough, England.

Additional test flights are planned from a site in Western Australia, according to Airbus, which says the Zephyr could also play a part in remote communications, maritime surveillance, border patrols, gauging environmental change and monitoring the spread of wildfires and oil spills.

The Zephyr operates at an altitude above the planet's weather systems where only the Concorde, the U2 spy plane and Mach 3 SR-71 Blackbird previously flew. Its ultra-light construction means it can be hand-launched by three people.

<https://www.bloomberg.com/news/articles/2018-08-08/airbus-spy-drone-stretches-flight-endurance-record-to-25-days>

The Army is buying microwave cannons to take down drones in mid-flight Russell
Brandom@russellbrandom Aug 7, 2018



The US Army has a new plan for microwaving drones out of the sky. [In a public solicitation last Friday](#), the agency announced its intention to purchase an airborne high-powered microwave system from Lockheed Martin, which is intended for use against drones. The weapon, which would be **mounted to an airplane**, would disable fixed-wing or quadcopter drones with a beam of focused radiation.

Drone countermeasures are particularly relevant in the wake of [an apparent assassination attempt](#) against Venezuelan president Nicolás Maduro that was carried out by a pair of hexacopter drones rigged with remote-triggered explosives. Each drone was equipped with a kilogram of C4 explosive. The Matrice 600's maximum carrying capacity is 5.5 kilograms.

"Unmanned aircraft system payloads under consideration include explosives, nets, entanglers/streamers, and high-powered-microwave sources," the solicitation reads. Responses to the new proposal are due by August 18th.

<https://www.theverge.com/2018/8/7/17660414/microwave-anti-drone-army-weapon-lockheed-martin>



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Country's first long-distance, residential drone delivery touches down in Montgomery County neighborhood Jacob Demmitt jacob.demmitt@roanoke.com



BLACKSBURG — It took **eight minutes** from the time a woman hit order on a mobile app until one of Wing's drones traversed 1.4 miles and came buzzing overhead on Tuesday afternoon with a package of **ice cream** and other frozen treats in tow.

Jackson Smith trotted into his yard to retrieve the cardboard box, and like that, the 2-year-old from rural Montgomery County became the recipient of **the most advanced drone package delivery to ever occur in the United States**, according to those who conducted Tuesday's operation.

Until now, Wing, a subsidiary of Google's parent corporation Alphabet, hasn't been allowed to fly long distances, over people and beyond the pilot's line of sight. That changed when Virginia was selected as one of 10 areas to participate in an experimental program that would lower barriers on the technology.

"You did see something **historic** today," Earl Lawrence, director of the Federal Aviation Administration's Unmanned Aircraft Systems Integration Office, said. "They can share the fact that the U.S. does have package delivery in its future."

https://www.roanoke.com/news/education/higher_education/virginia_tech/country-s-first-long-distance-real-world-drone-delivery-touches/article_455361bf-f36e-5eca-bf95-7c488dbc1a8a.html

Autonomous drones could herd birds away from airports Devin Coldewey@techcrunch



Bird strikes on aircraft may be rare, but not so rare that airports shouldn't take precautions against them. But keeping birds away is a difficult proposition: How do you control the behavior of flocks of dozens or hundreds of birds? Perhaps with a drone that autonomously picks the best path to do so, [like this one developed by CalTech researchers](#).

Soon-Jo Chung at CalTech became interested in the field after seeing the near-disaster in 2009 when US Airways 1549 nearly crashed due to a bird strike but was guided to a comparatively safe landing in the Hudson. "It made me think that next time might not have such a happy ending."



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"You have to be very careful in how you position your drone. If it's too far away, it won't move the flock. And if it gets too close, you risk scattering the flock and making it completely uncontrollable," Chung said. Armed with this new software, drones were deployed in several spaces with instructions to deter birds from entering a given protected area. As you can see below (an excerpt from [this video](#)), it seems to have worked.



More experimentation is necessary, of course, to tune the model and get the system to a state that is reliable and works with various sizes of flocks and bird airspeeds. A dozen or so drones informed by precision radar could protect quite a large area.

<https://techcrunch.com/2018/08/07/autonomous-drones-could-herd-birds-away-from-airports/>

Smallsats becoming a bigger part of DoD's resiliency calculations Debra Werner — August 7, 2018



Fred Kennedy, director of DARPA's Tactical Technology Office speaks Aug. 6 during a panel on "Creating a More Resilient Space Architecture" during the Small Satellite Conference at Utah State University in Logan, Utah.

LOGAN, Utah – To create space architectures that can withstand system failures and attacks by adversaries, U.S. defense and intelligence agencies see promise in resilient networks built around **constellations of small satellites**.

The U.S. Army and National Geospatial Intelligence Agency are voracious consumers of satellite imagery because both organizations are eager to keep watch on targets of interest. In the past, both organizations relied almost exclusively on large government owned and operated satellites. While that is beginning to change, widespread adoption of inexpensive commercial satellites and data sources **requires a cultural shift**, the panelists said.

"We have a risk-averse culture," Kennedy said. "It wants to spend a lot of time testing and fixing and testing reviewing. That's a problem in the defense community because we are outside the turning radius of our adversaries." To begin addressing that problem, DARPA created the Blackjack program which seeks to develop a satellite constellation in low Earth orbit to offer persistent, global coverage for military operations. <https://spacenews.com/smallsats-becoming-a-bigger-part-of-dods-resiliency-calculations/>



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D-Orbit to launch 10 Astrocast satellites on Vega rocket Jeff Foust — August 7, 2018



D-Orbit Chief Commercial Officer Renato Panesi (right) and Astrocast CEO Fabien Jordan pop a bottle of champagne after signing a launch agreement Aug. 7 at SmallSat. While D-Orbit will initially use standard cubesat deployers, the company is developing a customized free-flying deployer called Ion.

LOGAN, Utah — D-Orbit, an Italian company entering the rideshare market, won a deal to launch 10 Astrocast cubesats on a future Vega mission as it develops an advanced, free-flying deployer. In a ceremony during the AIAA/Utah State University Conference on Small Satellites here Aug. 7, the two companies signed a contract covering the launch of the 10 Astrocast cubesats as secondary payloads on a Vega rocket in late 2019 or early 2020. The satellites will be deployed into sun-synchronous orbits at an altitude of between 450 and 600 kilometers.

Astrocast is a Swiss company developing a **constellation of 64 cubesats** that will provide connectivity services for Internet of Things applications. The launch D-Orbit will provide will populate the second of eight orbital planes with eight operational satellites and two on-orbit spares. Jordan said Astrocast has an agreement with an undisclosed provider to launch satellites for the first orbital plane in the third quarter of 2019. <https://spacenews.com/d-orbit-to-launch-10-astrocast-satellites-on-vega-rocket/>

9Aug18

Kirstjen Nielsen to visit North Dakota to see how drones threaten border security Anna Giaritelli August 08, 2018

Homeland Security Secretary Kirstjen Nielsen will fly to North Dakota near the U.S.-Canada border on Thursday to learn about the threat drones pose to border security, and in particular, how drones are used to smuggle drugs across the border.

Nielsen will visit Grand Forks, a small city located 75 miles south of Manitoba, to observe U.S. Customs and Border Protection's own unmanned aerial systems. She will stop by the AMO's National Air Security Operations Center in Grand Forks with Sen. John Hoeven, R-N.D. "During the trip, Secretary Nielsen will address the Department's concerns regarding the **threats** from small unmanned aerial systems and reiterate that the Department is actively **seeking new legal authority** from Congress to protect and defend Americans against these types of airborne threats.

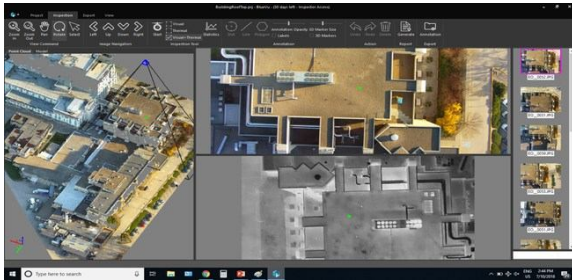


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The North Dakota base trains officers flying and spotting drones, as well as manned aircraft. Nielsen will be briefed by DHS personnel on how to increase the department's use of drones and technology to secure the border. <https://www.washingtonexaminer.com/news/kirstjen-nielsen-to-visit-north-dakota-to-see-how-drones-threaten-border-security>

Industrial SkyWorks bolsters BlueVu software for drone inspections BUSINESS

NEWS EMMA CALDER AUGUST 9, 2018



Industrial SkyWorks, a drone inspection and data management software provider, has announced the release of the latest update to its BlueVu platform. The upgrade version of the software features web-based portal support which enables **remote-inspection of assets**, saving time and money. The platform is also optimized to organize thousands of UAV images, generate automatic reports, track workflows and identify anomalies.

Industrial Skyworks' CEO, Michael Cohen, explained: "Today's drone inspections tools allow users to visually detect a problem, but BlueVu allows for a greater understanding of the asset problems by enabling the user to measure at inspection grade accuracy, directly within 2D photographs. Now, knowing the location, size and severity of problems is possible."

http://www.commercialdroneprofessional.com/industrial-skyworks-bolsters-bluevu-software-for-drone-inspections/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-271267-Commercial+Drone+Professional+DNA++2018-08-09

DHS Calls for Action After Explosive Drone Incident in Venezuela Betsy Lillian August 8, 2018



On Saturday, consumer unmanned aerial vehicles (UAVs) carrying explosives were deployed over a rally in Caracas, Venezuela, during a speech by the country's president, Nicolas Maduro, leading the U.S. government to reiterate its concern about the dangers posed by weaponized drones.

On Sunday, Kirstjen Nielsen, secretary of the U.S. Department of Homeland Security (DHS), tweeted about the threat of weaponized drones and urged the passage of legislation addressing DHS authority to thwart them.

Since the incident in Caracas, there has been a flood of news reports warning of the dangers of weaponized drones. Brendan Schulman, president of policy and legal affairs at DJI, suggested to

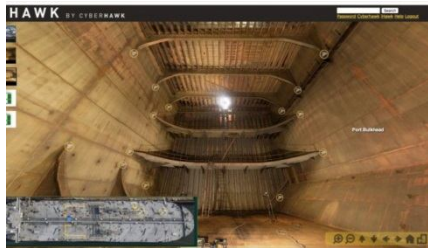


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the [Wall Street Journal](#) that the attack demonstrates the need for enhanced technology solutions – specifically, it “highlight[s] the importance of implementing remote identification solutions.” Importantly, Schulman noted he does not feel the incident will set back “the progress of commercial drones.” https://unmanned-aerial.com/dhs-calls-for-action-after-explosive-drone-incident-in-venezuela?utm_medium=email&utm_source=LNH+08-09-2018&utm_campaign=UAO+Latest+News+Headlines

Cyberhawk Carries out ABS-Approved Drone Survey of Oil Tanker Betsy Lillian

August 8, 2018



Cyberhawk has [completed](#) an American Bureau of Shipping (ABS) Intermediate Hull Survey 4 on an oil tanker using UAVs. It included 12 cargo oil tanks, two slop tanks and five ballast tanks. ABS attended to ensure the inspection complied with specific ABS rules set for tankers. The inspection also had to satisfy the U.S. Coast Guard’s Critical Area Inspection Plan, as the vessel was American-flagged and operated in Alaskan waters.

The traditional method of inspection for this type of tanker would be to scaffold the inside of the tank and have ABS surveyors perform a visual survey and technicians take thickness measurements. There are multiple liabilities associated with this type of working, from potential dropped objects caused by lowering equipment into the tank, to potential damage to the tank coating, to working at height in confined spaces. Furthermore, the time required to set up and remove the scaffold, together with the time required for inspection, is roughly **seven days per tank compared to one day per tank**.

The Cyberhawk team completed more than 350 flights and collected over 600 GB of data. The data is being hosted in iHawk, Cyberhawk’s cloud-based visual asset management software, which is providing the client with a 360-degree view of the inside of the tanks. iHawk is also providing a complete visual record, which can be referred to on an ongoing basis to monitor the condition of the tank and the degradation of any defects. https://unmanned-aerial.com/cyberhawk-carries-out-abs-approved-drone-survey-of-oil-tanker?utm_medium=email&utm_source=LNH+08-09-2018&utm_campaign=UAO+Latest+News+Headlines



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DOI: Drone Disruptions at Wildfires Down 25% From 2017 Betsy Lillian August 7, 2018



The U.S. Department of the Interior (DOI) is reporting significantly fewer incidents of drone disruptions at wildland firefighting. According to an [Aug. 3 update](#) from the agency, as of July 27, there have been 18 drone incursions, representing **a decrease of 25%** from the same time last year. Furthermore, in all of 2017, the DOI counted 14% fewer incursions than in 2016. The agency explains that unauthorized drones at wildfires can force firefighting aircraft to be grounded.

In 2015, the agency, as part of a partnership with the Federal Aviation Administration and the U.S. Forest Service, introduced the "If You Fly, We Can't" and "B4UFLY" campaigns. The DOI says these "public outreach materials are a standard part of every incident management team's toolbox."

For those who "continue to endanger firefighters and their communities by insisting on flying drones near wildfires," the agency adds, "**vigorous enforcement** of laws and regulations pertaining to interfering with agency functions and careless or reckless aircraft operations becomes necessary." https://unmanned-aerial.com/doi-drone-disruptions-at-wildfires-down-25-from-2017?utm_medium=email&utm_source=LNH+08-09-2018&utm_campaign=UAO+Latest+News+Headlines

Bipartisan Effort in Congress Prioritize the Integration of Drones into National Airspace Juan Plaza August 6, 2018



The full integration of manned and unmanned aircraft over the national airspace has been a key issue for both industry and regulators alike since the introduction of Part 107 two years ago. Enabling this kind of integration is considered the logical next step in UAV legislation since commercial drone operators recognize the need for a comprehensive and complete amalgamation of rules and regulations for both drones and traditional aircraft.

Congress has entered the conversation with an important amendment. On Jul 31st, U.S. Sen. Mark R. Warner (D-VA) [introduced a bipartisan amendment](#) sponsored by Sens. John Hoeven (R-ND) and Catherine Cortez Masto (D-NV) to the FY19 Transportation, Housing and Urban Development portion of the 'minibus II' spending package that would provide \$6 million



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towards unmanned aircraft systems research to safely integrate them into the national airspace. Currently, the FY19 T-HUD base bill makes \$3 million available as matching funds for companies that partner with the UAS test sites working towards integrating UAS into the national airspace. [Senator Warner's amendment](#) would boost UAS research funding levels to **\$6 million**.

Senator Warner has been a strong supporter of research and investment in unmanned systems, including driverless cars, drones, and unmanned underwater vehicles. He has introduced bipartisan legislation designed to advance the development of unmanned aircraft systems and build on the Federal Aviation Administration's (FAA) efforts to safely integrate them into the National Airspace System.

Warner's amendment co-sponsor, Senator John Hoeven from North Dakota, is a member of the Senate Appropriations Committee on Transportation and Housing and Urban Development and has been an ardent advocate of UAV technology in his state.

The third sponsor of this funding amendment was U.S. Senator Catherine Cortez Masto (D-Nev.) who said, "Increased funding for unmanned aircraft systems research will create new opportunities for Nevada to tap our state's potential for creating innovative new technology. In June 2017, Cortez Masto introduced the [Safe DRONE Act](#), bipartisan legislation to advance the development of unmanned aircraft systems and build on the Federal Aviation Administration's efforts to safely integrate them into the National Airspace System.

https://www.expouav.com/news/latest/bipartisan-effort-in-congress-prioritize-the-integration-of-drones-into-national-airspace/?mkt_tok=eyJpIjoiWXpabFptWTNNalprWVRaayIsInQiOiJlUcGZ3U2p3NHprR2Q5WVNUMkhMRV E5aWR5UHpaazY2NEFvTjJHdDZoSzVFcW9iczBYaIZRQlIJQ2VwdEdHZ1VFN1FlcnduQVZYaFpIR0tROkpON nVFWmRLSHR4TThENWdrS3IHSWpxRIE1ME1qa0JUJzJlrSjhGNGwyM3pacG9PYyJ9

FAA Remote Pilot Certification Reaches an Important Milestone Juan Plaza August 7, 2018



On July 26th the Federal Aviation Administration (FAA) [announced](#) that more than **100,000 people have obtained a Remote Pilot Certificate** to fly a drone for commercial and recreational uses. The number is calculated based on the number of applicants who have successfully completed the UAS aeronautical test since the small drone rule went into effect on August 29, 2016.



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In a recent conversation with the owner of a flying school in Conroe, TX, we were told that the number of applicants for Part 107 pilot certificates **exceeds the number of new private pilot** (manned aircraft) **by a margin of two to one**. [Under Part 107](#), the person actually manipulating the controls of an unmanned aircraft system or UAS must have a Remote Pilot Certificate or be directly supervised by someone with such a certificate. The majority of drone pilots get certified by studying the [concise online materials](#) and then passing an initial aeronautical knowledge test at an FAA-approved [knowledge testing center](#). So far the exam success rate is 92 percent.

A Remote Pilot Certificate is valid for two years from the date of issue. You can find all the information you need to [renew your certificate on the FAA website](#).

A large number of these 100,000 Part 107 certificate holders are pilots of manned aircraft and that ensures that both groups are using a common language and the foundation is already laid for a [safe integration of manned and unmanned aircraft](#) in controlled airspace.

https://www.expouav.com/news/latest/faa-remote-pilot-certificates-milestone/?mkt_tok=eyJpIjoiWXpabFptWTNNalprWVRaaylsInQiOiJlUcGZ3U2p3NHprR2Q5WVNUMkhMRVE5aWR5UHpaazY2NEFvTTJHdDZoSVFqeW9iczBYalZROlJQ2VwdEdHZ1VPN1FlcnduQVZYaFpIR0tRQkpONnVFWmRLSHR4TThENWdrS3IHSWpxRIE1ME1qa0JUJzlrSjhGNGwyM3pacG9PYyJ9