



UAS and SmallSat Weekly News

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Hundreds of drones are in Williamsburg's skies, what are your rights from the ground? Steve Roberts, Jr. November 30, 2017



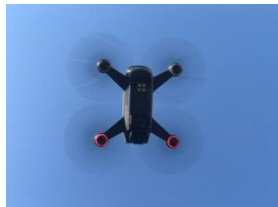
It was 5:30 in the morning when a distant sound like a bee allegedly spooked two horses at a James City County farm. The horses had injured themselves on a fence; 17 minutes later, police were called.

A drone, or an unmanned aircraft system, flew over the horse farm at a height of 350 feet near the James River to capture video of the 6:11 a.m. sunrise on July 31, 2017, according to a [Police Report on Drones](#).

The manager of the horse farm, alleged to police that the drone had frightened the horses "and caused them to break through a fence," the report states.

After the police left and the horses were calmed, the manager of the farm, Kayleigh Hirsh, decided to take matters into her own hands. "It was a very severe incident for the farm," Hirsh said. "I had to move every horse in the front of the farm to the back of the farm because they were legitimately scared."

Hirsh soon erected a 30 foot long sign on the edge of the property. It read "NO DRONE ZONE."



The accusation that the horses were frightened intentionally was later determined to be "unfounded" by police, and **no charges were filed** against the drone's operator, **but the case has brought to light the legal grey areas in operating new technology**.

<https://wydaily.com/2017/11/30/hundreds-of-drones-are-in-williamsburgs-skies-what-are-your-rights-from-the-ground-tek/>

Drone sightings near airplanes on the rise MELANIE ZANONA - 11/30/17 _



Pilots are reporting seeing more drones flying near airplanes and other aircraft, representing a potentially dangerous trend as federal regulators wrestle with how to safely integrate the emerging technology into the nation's skies.

The Federal Aviation Administration (FAA) says it has received **over 2,000 drone-sighting**



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complaints alone this year, for an average of almost 200 reports from pilots each month. The agency received approximately 1,800 complaints in 2016 and 1,200 complaints in 2015.

The rise in drone sightings comes on the heels of a study from the FAA earlier this week that found a small drone could inflict more damage than a bird if it strikes an airplane. An Army helicopter was seriously damaged earlier this year after colliding with a civilian drone, though no one was injured in the incident. The FAA says it has been ramping up public education and outreach efforts, such as through the "Know Before You Fly" campaign and the small unmanned aerial system registration process, to further improve safety.

<http://thehill.com/policy/transportation/362556-drone-sightings-near-airplanes-on-the-rise>

FAA to Develop Drone Collision Risk Mitigation Requirements Based on ASSURE Report Jane Edwards November 30, 2017 Civilian Agencies, Latest News



The Federal Aviation Administration plans to establish new requirements for drones to help mitigate collision and operational risks based on the [results of a study](#) released by the Alliance for System Safety of UAS through Research Excellence.

A research team at ASSURE performed computer simulations and physical tests to examine potential damage to a manned aircraft in the event of a collision with a small unmanned aerial system and found that drone collisions inflicted more structural damage to the aircraft than bird strikes, FAA [said Tuesday](#). Researchers also examined the potential impact of drone collisions on the manned aircraft's windshields, horizontal and vertical stabilizers and wing leading edges as well as the severity level of structural damage posed by unmanned aerial systems to the aircraft's engine components and airframe.

The study also concluded that drone manufacturers should help reduce collision risks with other aircraft through the **integration of "geo-fencing" and "detect-and-avoid"** functionalities into their unmanned platforms. <http://www.executivegov.com/2017/11/faa-to-develop-drone-collision-risk-mitigation-requirements-based-on-assure-report/>

In Rwanda, Drones Deliver Medical Supplies to Remote Areas Robert Lee Hotz, Dec. 1, 2017

MUHANGA, Rwanda—A San Francisco-based automated logistics firm called Zipline International Inc. is working with the Rwandan government to deliver blood and vaccines by drone on demand. The company plans to expand into Tanzania next year.



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Zipline flight operator Michael Ngamije conducted preflight safety checks in Muhanga, Rwanda, before launching a drone.

The Zipline service in Rwanda operates from a small base amid bean fields in the country's highlands. The company has logged **2,000 medical flights in the past year** using 15 all-weather unmanned battery-powered aircraft. "By flight volume, they are operating one of the busiest airlines in Africa," says Zipline spokesman Justin Hamilton.

Zipline is preparing to open a second drone base in Rwanda, bringing its fleet there to 60 drones. It plans to open four bases in Tanzania, **where it expects to operate 120 autonomous aircraft** to supply blood, vaccines and other medical supplies to 1,000 clinics that together serve about 10 million people.



Bags of blood that were dropped by a drone were stored in a refrigerator at Kabgayi Hospital.

Zipline hopes to expand to the U.S. And Matternet secured permission in March to open **the first autonomous drone medical delivery network in Switzerland**, in partnership with the national postal system Swiss Post. When operational, the program expects to lease each of its drones for \$2,000 a month and charge the same rate for the vehicle's automated base station, which serves as a docking port where batteries can be recharged between flights and packages loaded. Company executives say that **would save Swiss hospital systems up to 40% over the current cost of on-demand delivery.**

"The technology is in its infancy but already it has compelling cost and delivery advantages," says Matternet CEO Andreas Raptopoulos. "We think this will be **really transformational for medical logistics.**" <https://www.wsj.com/articles/in-rwanda-drones-deliver-medical-supplies-to-remote-areas-1512124200>



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Cyberhawk Inspects American Nuclear Plant in a First for UAVs Frank

Schrothorn: December 01, 2017



Cyberhawk Innovations is claiming to have completed **another world first** for the drone industry in the nuclear energy sector.

Cyberhawk has inspected two concrete PWR containment domes for American Electric Power at the Cook Nuclear Plant, located along Lake Michigan's eastern shoreline.

Although drones have been used in the nuclear industry, according to Cyberhawk, this was the first time a drone has been used by the American Society of Mechanical Engineers (ASME) according to the Section XI Code. The Code refers to several American Concrete Institute standards for completing an examination and this inspection has been recognized within the nuclear industry as a best practice based on these standards.

Inspections of this type typically involve using a man basket with a costly 60m (180ft) crane incurring that takes time to get the equipment on site and set up. It took one week for Cyberhawk to inspect both containment domes using a drone with minimal site disruption. The drone inspection generated **direct cost savings of over 300%** for AEP as well as significant indirect cost savings through reduced site disruption.

<https://dronelife.com/2017/12/01/cyberhawk-inspects-american-nuclear-plant-in-a-first-for-uavs/>

Northern Nevada mines adopting drone technology SUZANNE FEATHERSTON *Elko Daily Free Press* NOVEMBER 30, 2017 ELKO, NEV.

The use of unmanned aerial vehicles at mines is taking off in northern Nevada as operators apply the technology to tasks such as surveying and inspections.



Pennsylvania-based Identified Technologies serves the SSR Mining Inc. Marigold Mine in Valmy, east of Elko, by providing a drone and data-processing services. In January, the company began training its staff and started to work flights into its routine at the run-of-mine heap leach operation.

At Marigold, the technology is used mainly for making topographic maps for reports and audits; taking detailed aerial photos of leach pads for solution application management; and inspecting



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slopes and high-walls in areas with limited access to search for tension cracks, settling and bench integrity.

"With traditional methods, it took 20 hours of surveying and processing labor to obtain a detailed survey of a specific section of the mine site," Identified Technologies stated in a press release. "Using Identified Technologies' drone solution, the same results were achieved with (one) hour of work. This has allowed SSR to increase speed and productivity, without increasing staffing costs and headcount, while decreasing the frequency of its full site flyovers."

<http://www.thenewstribune.com/news/business/article187473993.html>

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Niger okays armed flights of US drones Lolita C. Baldor and Robert Burns | AP December 1

WASHINGTON — The Pentagon has received permission from the government of Niger to begin flying armed drones from the capital, Niamey, a U.S. official said Friday.

The U.S. official said armed drone flights could begin as early as next week or at least by the end of December. The memorandum of understanding limits the drones to defensive missions, the official said. The official was not authorized to discuss the matter publicly and so spoke on condition of anonymity.

The U.S. military has been targeting a number of extremist groups in Africa, including Boko Haram, al-Shabab, the Islamic State group and an IS splinter group known as Islamic State of the Sahel. The U.S. Africa Command has accelerated airstrikes against al-Shabab fighters in Somalia in recent weeks. https://www.washingtonpost.com/world/national-security/niger-okays-armed-flights-of-us-drones/2017/12/01/a2464ca6-d6b4-11e7-9ad9-ca0619edfa05_story.html?utm_term=.065cdc2bed2f

Walla Walla County debuts mapping drone [Andy Porter](#) Dec 3, 2017



Seth Walker, center, talks with Walla Walla County commissioners Todd Kimball, left, and Jim Johnson about the Public Works Department's new drone aircraft Friday. The unmanned aerial vehicle will be used for survey work, aerial photography, project inspection and other tasks.

As it flies, the drone follows a programmed flight path over the area to be surveyed. During the mission, photos and data recorded by the unmanned aircraft



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are sent by radio back to a computer, which stores the information while displaying the progress of the flight on its screen. The black UAV was in the skies Friday morning performing an aerial survey of Whitman Drive for a planned bike-pedestrian pathway.

RDO Integrated Controls of Pasco was the lowest of two bidders with an offer of **\$29,058.25**, which included the drone and flight planning and image mapping software needed to process data to create a digital surface model and imagery. The contract also included on-site training from the vendor and one year of technical support.

Although the purchase price may seem costly compared with the hobbyist models being widely sold, the computer hardware and software that accompany the UAV make it well worth the money, said Public Works Director Randy Glaeser.

"It's huge," he said. The mapping and survey **data delivered by the drone in about one hour** of flight time **would take a traditional, ground-bound surveying team about three to five weeks** to accomplish. http://www.union-bulletin.com/news/local_governments/walla_walla_county/walla-walla-county-debuts-mapping-drone/article_8f34f58c-d7c1-11e7-ae95-7b055e9cafe1.html

Kamloops Search and Rescue drone pilot project extended another year [Vanessa Ybarra](#) December 2, 2017



KAMLOOPS, BC — Kamloops Search and Rescue says drones have proven to be a valuable tool in the field.

KSAR Search Manager Michelle Liebe says they've used the devices in **more than a dozen rescues** throughout the greater Kamloops region throughout the **last year**, in particular in

areas with steep terrain.

"We had a few searches where a really steep mountainside was inaccessible to search but it was really easy for the drone to get in there and look." Liebe says the device's thermal camera that **can detect body heat** in an area allowed crews to conduct searches faster.



"During an ice rescue, rather than sending all the people to cover all of the lake, we sent the drone out first. The system allowed us to find where there were some different heat signatures in the ice and then we sent people to those areas specifically first which **saved a lot of time**."

<http://cfjctoday.com/article/599718/kamloops-search-and-rescue-drone-testing-extended-another-year>



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Meet the Spider King: MMC Is Changing the Way Utility Companies Work Around the World [Alan Phillips](#) on: November 10, 2017



China's industrial drone company, [MMC](#), is changing the way that utility companies around the world think about power line stringing. Power line stringing by drone offers tremendous advantages to developing countries without a robust road infrastructure system. Performing the stringing by drone is not only safer for utility workers, but protects the environment and provides easier access to difficult terrain.

The process is simple – but the results are stunning. MMC equips their industrial drone with a guiding line and travels from tower A to tower B – even if tower B is over the ocean. A process normally requiring a boat and large teams of utility workers **can be completed in minutes**. Thailand's EGAT (The Electricity Generating Authority of Thailand) is the state enterprise responsible for power generation and transmission across the entire country – and after seeing this demonstration in Phuket, they've signed MMC to complete a major project in Northern Thailand early next year. <https://dronelife.com/2017/11/10/mmc-changing-the-way-utility-companies-work/>

SkyX Drone Completes Autonomous 100km Data Collection Flight 05 Dec 2017 |

Caroline Rees



[SkyX Systems Corporation](#), has announced that it has completed an unmanned data collection flight of 100km, which the company claims is **one of the longest journeys in its class**.

The firm successfully flew its SkyOne Unmanned Aerial System on an autonomous data mission over a gas pipeline in Mexico. The flight was programmed and **monitored remotely from** the company's Greater **Toronto** Area SkyCenter mission control, with a support crew of engineers on the ground in Mexico.

The longest of multiple flights identified more than 200 potentially significant anomalies along the remote pipeline, ranging from unauthorized buildings and cultivation, through to a fissure possibly caused by seismic activity.



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The flights mark **a milestone for several reasons**. A 100+ kilometre flight gathered data in a little more than an hour that would have taken a person well over a week, and that mission identified more than 200 geo-referenced anomalies the customer was unaware existed, pinpointing precise coordinates for rapid investigation and remediation.

http://www.unmannedsystemstechnology.com/2017/12/skyx-drone-completes-autonomous-100km-data-collection-flight/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=e8a78f65c3-eBrief_2017_Nov_28&utm_medium=email&utm_term=0_6fc3c01e8d-e8a78f65c3-119747501

MicroPilot Integrates Sense & Avoid System into UAV Autopilot 04 Dec 2017 |

Caroline Rees



[MicroPilot](#) has announced that it has integrated the [FLARM](#) Sense and Avoid system with its autopilot, granting clients a reliable collision avoidance option for fully autonomous UAV operations.

FLARM is a traffic awareness and collision avoidance technology used by light aircraft and UAVs. When integrated with MicroPilot's autopilot, the system alerts the autopilot of nearby aircraft, along with their velocity and altitude. Using this information, the autopilot decides how to avoid the other aircraft, autonomously preventing a collision without input from a human operator.

With airspace becoming increasingly crowded and UAVs becoming more popular, a reliable sense and avoid system has become a necessity, especially for beyond visual line of sight (BVLOS) and other autonomous operations.

http://www.unmannedsystemstechnology.com/2017/12/micropilot-integrates-sense-avoid-system-uav-autopilot/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=e8a78f65c3-eBrief_2017_Nov_28&utm_medium=email&utm_term=0_6fc3c01e8d-e8a78f65c3-119747501

Airbus Invests In Maker Of ADS-B For UAVs Dec 4, 2017 [Graham Warwick](#) | *Aerospace Daily & Defense Report*



[Airbus'](#) venture capital investments in the unmanned aircraft industry are continuing with the company taking a stake in uAvionix, a Montana-based startup developing miniaturized automatic dependent surveillance-broadcast (ADS-B) **transceivers for detect-and-avoid in UAVs**.

Airbus Ventures has led a \$5 million Series round of



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investment in the company, along with existing investors, and takes the funding raised so far to \$10 million. The new funding will be used to expand the products and services offered by uAvionix, which also makes low-cost ADS-B and GPS receivers for general aviation and unmanned aircraft.

Airbus previously invested in AirMap, a provider of airspace management services for drones, the European manufacturer participating in its \$26 million Series B round in February.

http://aviationweek.com/technology/airbus-invests-maker-ads-b-uavs?NL=AW-05&Issue=AW-05_20171205_AW-05_735&sfvc4enews=42&cl=article_3&utm_rid=CPEN1000003332045&utm_campaign=12864&utm_medium=email&elq2=b463b6b5db8a4745b207e6ffae73141e

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The Military Is Using Falcons to Build a Drone Killer

A raptor's approach to targeting prey may one day help protect soldiers and even airports, Air Force-funded research shows. Justin Bachman December 5, 2017, 4:00 AM EST

A U.S. Air Force-funded study by zoology researchers at Oxford University suggests that the means by which a peregrine falcon tracks its quarry could be effective in defending against drones that threaten troops, police or airports.. The work, the researchers suggested, could be applied to the development of small, visually-guided **drones that can disable other drones**.

The application to drone defense "emerged naturally through the course of the study" given research by several police forces to eliminate drones using trained raptors, the authors said.

Taylor called the study's findings "an elegant convergence" of raptor behavior and missile guidance law, "which reflects how natural selection and engineering design are constrained similarly by maths and physics. It's also quite beautiful how well the model fits the data, and thrilling for me as a mathematically-minded biologist to see how the flight trajectories of real birds engaged in real attacks emerge from the equations that ultimately govern them."

<https://www.bloomberg.com/news/articles/2017-12-05/the-military-is-using-falcons-to-build-a-drone-killer>

Safety Incidents Involving Civilian Drones Are Surging Daniel Flatley December 5, 2017

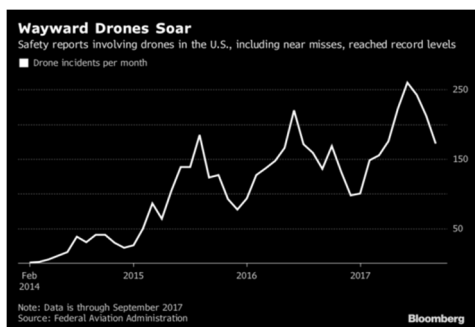


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The number of reported safety incidents involving civilian drones is on track to rise dramatically again this year, with almost as many in the first nine months of 2017 as for all of last year.

Through September, the [Federal Aviation Administration](#) received **1,688 reports** of drones flying in restricted airspace or otherwise appearing to violate rules. That compares with 1,754 last year and 1,210 the prior year. In 2014, the year the administration first began collecting data, there were only 236 reported incidents.

In response, the agency said in October that it wants to make it easier for enthusiasts to get permission to pilot low-level flights in restricted airspace. The agency said there has been so much pent-up demand that users have been willing to break the law to get their drones in the air.



The number of reported incidents reached a new record of 260 in June. Incidents have risen compared to the same month in the prior year all but once since the FAA first started keeping records in February 2014. There have been a total of 4,889 incidents reported in less than four years. <https://www.bloomberg.com/news/articles/2017-12-05/safety-incidents-rise-along-with-popularity-of-civilian-drones>

New Jersey considers barring operating a drone while drunk Michael

Catalini | AP December 5

TRENTON, N.J. — New Jersey lawmakers are moving ahead with legislation that would make it illegal to operate a drone while drunk. The National Conference on State Legislatures says at least 38 states are considering drone legislation this year. U.S. airspace is exclusively regulated by the Federal Aviation Administration. **The FAA already has rules in place** barring the drunken operation of drones.

New Jersey's Department of Environmental Protection issued a rule in 2015 barring drones in state parks, but lawmakers say this legislation would be the first statewide law on drones, if enacted. Lawmakers say the changes are aimed at pre-empting local ordinances that might vary.

The bill specifically would make operating a drone under the influence of alcohol a disorderly persons offense, which carries a sentence of up to six months in prison, a \$1,000 fine or both. It also would make using a drone to hunt wildlife and endanger people or property a similar



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offense. The legislation also bars using drones to endanger safety at correctional facilities a crime as well as interfering with first responders who are engaged in transport.

https://www.washingtonpost.com/national/new-jersey-considers-barring-operating-a-drone-while-drunk/2017/12/05/ce90c5c0-da01-11e7-a241-0848315642d0_story.html?utm_term=.e8f72db4529b

IATA Seeks Strong Law Enforcement to Deter Irresponsible Use of Drones REUTERS DEC. 5, 2017

GENEVA — Law enforcement authorities must play a strong role to ensure there are suitable deterrents in place for those flying recreational drones to prevent danger to passenger aircraft, the International Air Transport Association said on Tuesday.

Risks posed by the increasing use of drones were highlighted in October when a drone hit an aircraft landing at a Canadian airport and there have been several near-misses between drones and passenger planes in Europe.

"This is something we do not want to see continuing," Rob Eagles, director of air traffic management infrastructure at IATA told journalists on Tuesday. "We see a strong role for law enforcement. One of the concerns we have is the unprofessional operation of small recreational drones because people do not understand the risks they could have against manned aviation," he said. "There has to be an active deterrent so people understand the responsibility they bear and the risks associated with irresponsible use of small recreational drones," he said, adding that IATA was also seeking to raise awareness and educate users. <https://www.nytimes.com/reuters/2017/12/05/business/05reuters-airlines-iata-drones.html>

Chinese firm JD.com pitches Trudeau on drone fleets to deliver seafood



A drone carrying a package arrives at a goods delivery landing site in Xi'an, capital of northwest China's Shaanxi Province, June 20, 2017. XINHUA/SIPA/XINHUA/SIPA/NEWSCOM [NATHAN VANDERKLIPPE](#) BEIJING DECEMBER 5, 2017

You might call it the Flying Lobster – or maybe **Brisk Bisque**.

One of China's biggest online companies wants to deploy a fleet of drones in Canada to airlift seafood from East Coast processing plants to the airport, cutting out land-haul costs in its bid to deliver more Atlantic lobsters, prawns and clams to Chinese consumers. [JD.com](#) is also developing plans for a drone network for the Canadian West Coast that could be used to carry local blueberries to cargo aircraft headed for China. It wants to replicate plans for similar drone



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networks in China, where it believes unmanned aircraft can slash logistics costs by 50 to 70 per cent, CEO Richard Liu said in an interview Tuesday.

Mr. Liu met with Prime Minister Justin Trudeau in Beijing Tuesday and discussed the concept of bringing the company's delivery drones to Canada. JD, an Amazon-like company that is China's largest direct online sales platform, needs government approval for a licence to operate drones nation-wide. <https://www.theglobeandmail.com/news/world/chinas-jdcom-pitches-trudeau-on-drone-fleets-to-airlift-seafood/article37197583/>

Creative Drone Photography by Ben Moore December 5, 2017 [photogrist stuff Ben Moore](#)



Ben Moore is a talented self-taught photographer and adventurer currently based in Hoddesdon, village in Hertfordshire, England. Ben shoots a lot of travel, architecture, lifestyle and street photography. See the photos at <https://photogrist.com/creative-drone-ben-moore/>

New UTM System Uses Cellular Network to Extend Flights BVLOS Juan Plaza

[Terra Drone Inc.](#) has announced the completion of their new 4G LTE control system, which allows operators to remotely monitor

drones via an LTE network.



This system enables a drone to **safely fly beyond visual line of sight (BVLOS) and remain in contact with the operator at all times**. That includes being able to transmit a live image of the flight path and its surroundings, allowing the remote operator to control the aircraft by sight. The network connection allows the drone to respond to sudden changes to flight routes and execute a forced return in case of emergency, all of which are essential capabilities of a UTM system.

In May, Terra Drone conducted a BVLOS drone flight using its UAV Traffic Management (UTM) system in Da Nang, a coastal city in central Vietnam, in cooperation with the Vietnamese government. The test flight was the first of many to demonstrate, test, review and improve the ability of UAVs to operate BVLOS of the remote pilot in command. It also added a few elements of Artificial intelligence (AI) which is seen as the next innovation horizon for drone technology. These AI capabilities will enable a drone to identify water, land, trees, buildings and plenty

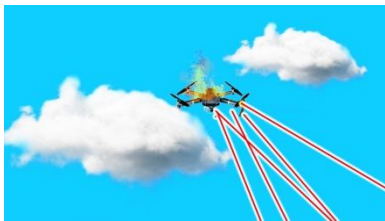


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more. <https://www.expouav.com/news/latest/new-utm-system-uses-cellular-network-extend-flights-bvlos/>

Chinese Laser Weapons Will Be Gunning for Our Drones

Off-the-shelf drones are small, quiet, nimble, and cheap, leaving counterdrone weapons systems playing catch-up. DAVID AXE 12.06.17



The Chinese military has tested a laser designed to shoot down small drones. And it's not alone. All over the world, armies are developing defenses against small, cheap unmanned aerial vehicles.

China test-fired its counterdrone laser in a trial in suburban Beijing on Nov. 26. An official military website [published photos](#) depicting the truck-mounted laser, a quadcopter target drone, the fiery impact of an invisible laser blast and the aftermath of the test—the quadcopter with a scorched, finger-width hole in its airframe.

The laser, which appears to be a five- or 10-kilowatt system, has obvious military applications. Small drones are becoming a serious military threat to armies everywhere. Perhaps more worryingly, Islamic State, Hezbollah, and other terror groups have begun strapping grenade-size explosives to off-the-shelf consumer-grade drones and sending them on bombing runs targeting soldiers and civilians. The U.S.-led coalition in Iraq [reported](#) 100 encounters with ISIS drones over a two-month period in early 2017.

Apparently taking a cue from ISIS, at least one Mexican cartel has also armed small UAVs. In October, police in Guanajuato [pulled over](#) a truck evidently being driven by drug traffickers and containing assault rifles and a drone fitted with a bomb. <https://www.thedailybeast.com/chinese-laser-weapons-will-be-gunning-for-our-drones>

7Dec17

US, Coalition Forces Use Remotely Piloted Aircraft in Fight Against Islamic State Group

Jane Edwards December 6, 2017 Defense & National Security, Latest News



Rea | Axcel Innovation | Charlottesville and Portsmouth, VA
t.rea@axcel.us | 757-309-5869 | www.axcelinnovation.com



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U.S. military personnel and coalition partners used combat remotely piloted aircraft to counter the Islamic State militant organization in Raqqa, Syria, the [U.S. Air Force reported Tuesday](#).

The aircrews flew combat RPAs for at least 44,000 hours to get a view of the battlefield, locate the friendly forces and perform precision munition strikes through the “buddy lasing” tactic.

“Primarily, we were doing things like close air support, tactical reconnaissance and overwatch of our allies as they fought to take back the city block by block,” said Lt. Col. Nicholas, a squadron commander assigned to Air Force’s 432nd Wing.

“What our aircraft brought that was unique to the fight was **persistence**,” Nicholas said of the combat RPAs. He also cited how the use of the drones in an urban environment provided aircrews visual contact in munition strikes.

The U.S. and coalition forces liberated the city of Raqqa in October four months after they launched an effort to eliminate the militant organization’s strongholds in the city.

<http://www.executivegov.com/2017/12/us-coalition-forces-in-syria-use-remotely-piloted-aircraft-against-islamic-state-group/>

Drone Parks Worldwide Envisions UAV Stadiums — Open to Everyone Jason

Reagan December 02, 2017



Ah yes — the sports stadium experience, our cultural heritage. The anticipation of the players, the roar of the crowded and – wait – the buzz of the drone?

If [Drone Parks Worldwide](#) has its way, the cacophony of racing drones could someday be a huge part of the stadium-sports landscape. The Texas-based startup dreams of launching a network of experiential drone stadiums to provide a dynamic venue for safe and legal drone flight, while also promoting diversity and inclusivity in the UAV world.

“The long-term goal of Drone Parks Worldwide is to have stadium-scale facilities in every major city across the world where anyone can enter and fly a drone for any purpose,” said co-founder and COO Marjorie Ferrone in an exclusive DroneLife interview.

<https://dronelife.com/2017/12/02/drone-parks-worldwide-envisions-uav-stadiums-open-everyone/>



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FAA Recommends UAS Operators Don Orange Vests with “Drone Pilot Stand

Clear” Frank Schroth: December 01, 2017



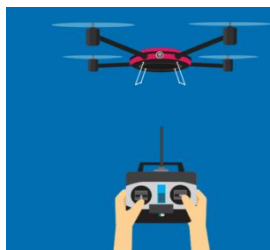
The FAA and USDOT recently released what they refer to as an “Information for Operators” (InFO) memo recommending that:

remote pilots and other sUAS flight crew members wear brightly colored and reflective vests during flight operations. By taking this simple action, the sUAS flight crew can demonstrate that they are accepting responsibility for the activity and that they are intending to operate in a safe and compliant manner. The vest should have wording on the back identifying the individual as the remote pilot, visual observer, or crew. The vests should have the wording such as “Drone Pilot Please Do Not Disturb”, “Drone Pilot Stand Clear”, “Drone Pilot” or similar warnings against distracting the person wearing it.

While that may not make the most impressive fashion statement, it will in the opinion of the departments reduce unnecessary calls to law enforcement agencies. The FAA believes this can cut down on the calls made by the public regarding compliant operators. As the FAA notes, these are not actionable and can potentially tie up resources as officers engage with pilots who are legitimate and flying drones in a compliant manner. It also interrupts the pilot and the work they are trying to accomplish. You can find the full text of the Info [here](#).

<https://dronelife.com/2017/12/01/faa-recommends-uas-operators-don-orange-vests-drone-pilot-stand-clear/>

Congressional Testimony Focuses on Competition: “The Rest of the World Has Not Been Sitting in the Sidelines.” Miriam McNabbon: November 30, 2017



During yesterday’s House Aviation Subcommittee [hearing on drones](#), witnesses testified that the U.S. must work harder on regulation to maintain its global position in the industry. Witnesses from all areas of the industry, including representatives from Stanford University, [AirMap](#), [AUVSI](#) and FAA spoke to committee members. Major power infrastructure was represented by the Southern Company. Those with stakes in the drone industry had one consistent message for lawmakers – **speed up regulations**.

Stanford Professor Juan Alonso, a participant in multiple FAA drone committees and a researcher at the Aerospace Development Lab, said in written testimony that “a nimbler and more rational” regulatory approach would help the US to **regain** prominence in the



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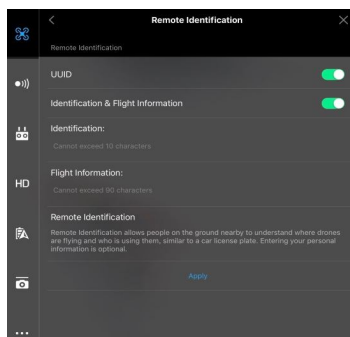
industry. While the U.S. has been working to develop drone technology, write Alonso, "The rest of the world has not been sitting in the sidelines: multiple countries have recognized the potential civilian and military value of drone technologies and companies that produce small and medium-sized drones have been created and are thriving. These foreign companies are laying the foundation for more complex vehicles and uses and have come to dominate this market."

Alonso says the U.S. needs to address three areas to maintain market position: more testing opportunities for new technologies, more publicly available data on testing results, and a faster moving regulatory process. <https://dronelife.com/2017/11/30/congressional-testimony-focuses-competition-rest-world-not-sitting-sidelines/>

DJI Introduces Voluntary Flight Identification Options For Drone Pilots Frank Schroth: December 01, 2017

DJI is introducing new features to the DJI AeroScope remote identification system that functions as an "electronic license plate" for drones. The new features allow drone pilots to voluntarily identify their flight operations to authorities while still protecting their privacy.

AeroScope is a system that remotely identifies and tracks airborne drones, allowing law enforcement and aviation safety officials to respond to safety and security concerns about drones. DJI drones locally broadcast their location, speed, heading and serial numbers to AeroScope receivers used by authorities at sensitive locations or in response to complaints. However, they do not broadcast personally identifiable information.



Once updated, the DJI GO 4 app will display a "remote identification" menu in the main controller settings. This menu gives pilots the option to broadcast their "UUID," a unique user identification code tied to each pilot's DJI GO account, and "Identification & Flight Information," if a pilot chooses to enter information into them. The default setting for both options is to not broadcast them, and these settings can be changed at any time.

AeroScope addresses the needs of authorities who know that most drone flights are harmless, but who are concerned and must be vigilant about tracking risky or illegal drone activity near airport runways, prisons and other sensitive locations. AeroScope also provides authorities with



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a tool to respond to complaints about individual drone usage and to investigate further.
<https://dronelife.com/2017/12/01/dji-introduces-voluntary-flight-identification-options-drone-pilots/>

Terra Drone and KDDI Successfully Complete First “Smart Drone” Flight RENEE KNIGHT



Unmanned aircraft system (UAS) service provider Terra Drone and KDDI, a Japanese telecommunications operator, recently completed the first “Smart Drone” **flight using a 3-D map and a drone port**. The drone port enables UAS to recharge automatically, according to a news release. In this test, which was conducted in Japan, the drone successfully returned to the landing site after a long distance flight that included spraying terraced ponds of Nishikigoi (carp) with pesticide. Typically, workers must spray pesticide in these ponds via boat, which is time consuming and labor intensive.

With this technology, users can automatically set altitude and apply effective pesticide coverage by setting the location. The drone port, developed by Prodrone, features an automatic landing function based on image recognition to enable long distance flight.

The team sees this technology eventually being used in areas other than agriculture, including surveying topography and equipment, security, disaster monitoring and drone delivery.
<http://insideunmannedsystems.com/terra-drone-kddi-successfully-complete-first-smart-drone-flight/>

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Nevada officials apply for federal drone-flying program *The Associated Press* DECEMBER 07

LAS VEGAS Nevada officials applied for **one of five guaranteed spots** in a federal program intended to increase the number and complexity of drone flights. The Federal Aviation Administration sees the program as a way to further integrate drones with national airspace. While state officials see it as a way to solidify Nevada as a key hub for the drone industry, The Las Vegas Review-Journal reported Wednesday.

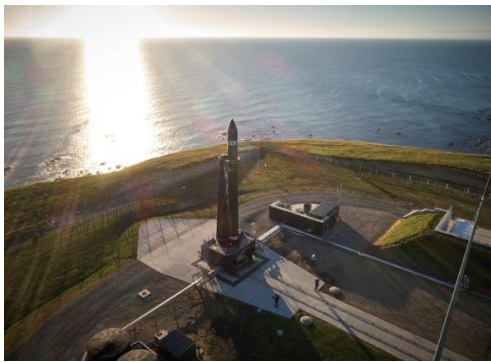
The pilot program aims to have state, local and tribal governments **partner** with private-sector drone entities to test advanced drone operations, such as flying over people or flying a drone outside an operator's visual line of sight.



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The program does not provide any funding, but it opens "a whole new world" for drone policy and is a chance for communities "to be on the cutting edge," said Lisa Ellman, partner and chair of the Global Unmanned Aircraft Systems Group at Washington law firm Hogan Lovells. . Applications are due Jan. 4. <http://www.miamiherald.com/news/business/article188500934.html>

Rocket Lab to Attempt Second Test Launch Tonight: How to Watch Live Elizabeth Howell, Space.com Contributor | December 7, 2017



The small-rocket startup [Rocket Lab](#) will attempt to launch its first customer payloads into orbit from New Zealand tonight (Dec. 7), and you have a chance to **watch it live online**.

Rocket Lab's Electron rocket is scheduled to lift off from the company's private launch range in New Zealand. The 4-hour launch window that begins at 8:30 p.m. EST, which is 2:30 p.m. on Dec. 8 New Zealand Time. The company [will provide a livestream of the launch on their website here](#), starting about 15 minutes before the rocket's anticipated launch. That same launch window will remain open for 10 days, and company representatives have said delays are likely, given the rocket is still in a testing phase.

If the Electron performs as expected, it will deploy three customer satellites. One is a **bread loaf-size**, Earth-imaging Dove satellite from the private company Planet (formerly Planet Labs). The other two are both Lemur-2 satellites for the private company Spire, which could be used for tracking ship traffic or mapping weather. https://www.space.com/39007-rocket-lab-second-test-launch-webcast.html?utm_source=sd-newsletter&utm_medium=email&utm_campaign=20171207-sdc