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7Apr18

Rocket Lab Sets Date for First Commercial Launch Jeff Foust, SpaceNews April 5, 2018



WASHINGTON — Rocket Lab plans to perform <u>the first</u> <u>commercial launch of its Electron rocket</u> later this month, carrying satellites for at least two companies, the company announced April 3.

In a statement, <u>Rocket Lab</u> said the launch window for the mission, dubbed "It's Business Time," from its New Zealand launch site will open April 19 at 8:30 p.m. Eastern time (April 20 12:30 p.m. local time). That launch window is open for four hours each day, extending for two weeks.

The launch will be the third for Rocket Lab, headquartered in the United States but with launch operations in New Zealand. An inaugural test launch in May 2017 failed to reach orbit after a telemetry problem triggered range safety systems, while a second test launch Jan. 20 was a success, placing several small satellites into orbit. After the second test launch, Rocket Lab declared the Electron operational and would begin regular commercial service. https://www.space.com/40215-rocket-lab-first-commercial-launch-date.html

Alliance for Drone Innovation to Provide Voice for Personal and Professional Drone Makers, Innovators, and Flyers April 7, 2018 News

The Alliance for Drone Innovation (ADI) (<u>droneinnovation.org</u>), a new policy-oriented coalition of manufacturers, suppliers, and software developers of personal and professional drones, has commenced operations to represent the interests of individuals, businesses, governments, scientists, academics and others who fly unmanned aircraft in the United States. Jenny Rosenberg, former Department of Transportation Acting Assistant Secretary for Aviation and International Affairs, serves as the group's Executive Director.

ADI is focused on promoting innovation and the growth of the unmanned aircraft industry for both personal and professional use. ADI promotes awareness among policymakers, media and the general public of how drones help society, ensuring that government policies allow everyone to achieve the benefits of safe and responsible drone flight.

"We look forward to working with Congress, the administration, and other stakeholders on policies that promote innovation and allow the drone market to flourish in a responsible and



safe manner," said ADI Executive Director Jenny Rosenberg.

http://uasweekly.com/2018/04/07/alliance-for-drone-innovation-to-provide-voice-for-personal-andprofessional-drone-makers-innovators-and-

flyers/?utm_medium=push_notification&utm_source=rss&utm_campaign=rss_pushcrew

UMD researchers will help create drones and surveillance tools after getting **federal grant** Lindsey Feingold April 5 at 12:37 AM



University of Maryland researchers will be devising strategies for drones and various ground vehicles for the military, thanks to a grant from a U.S. Department of Defense agency that invests in these technologies.

Robot swarms, which researchers aim to create strategies for building, are groups of airborne vehicles — also known as drones or unmanned aerial vehicles — and on-ground tools deployed in dangerous areas that are used for surveillance and to identify security risks, among other ventures, Defense Advanced Research Projects Agency spokesman Jared Adams said, adding that these drone swarms will not be lethal and will be used only for intelligence collection. The \$646,000 grant covers the next nine months of research.

The focus of the OFFensive Swarm-Enabled Tactics, or OFFSET program, is to develop swarm system technology, specifically in urban areas. The researchers' ultimate goal is to create swarms of 250 or more robots, Xu said. http://www.dbknews.com/2018/04/05/umd-researchersgrant-drone-technology/

General Atomics' Latest Drone Sets Day-Long Endurance Record CHRIS

JENNEWEIN APRIL 5, 2018 IN MILITARY

General Atomics Aeronautical Systems said Thursday its new Avenger drone has set an endurance record of nearly a day in the air.

Over a two-day period in January, the San Diego company's nextgeneration Avenger ER flew 23.4 continuous hours on a simulated reconnaissance mission. That's a 10-hour increase over the baseline aircraft.

The Avenger ER has a wingspan of 76 feet and a maximum gross takeoff weight of 19,500 pounds. It can fly at over 460 miles per hour.



https://timesofsandiego.com/military/2018/04/05/general-atomics-latest-drone-sets-day-long-endurance-record/

9Apr18

It's Not a Bird or a Plane. It's a 17-Foot Drone, and It's Here to Save Your Cellphone Service. CHRISTINE NEGRONIAPRIL 6, 2018



Two of the country's largest mobile phone companies are exploring using drones as flying mobile hot spots to provide phone and other services when cell towers are down or in areas where service does not exist.

"After Hurricane Sandy, we lost cell service countywide for several days," said Martin Pagliughi, the director of the Cape May County Office of Emergency Management in

New Jersey.

So on a raw day last month, several of Cape May's emergency responders gathered at a municipal airport in Woodbine to watch Verizon launch a 200-pound drone into the sky. When it reached an altitude of 3,000 feet, a hot spot on board started transmitting a wireless signal. On the ground, members of the Cape May Police Department noted the strength of the service on the Verizon-issued phones they were carrying.

"They were testing texting, they were testing voice, they had full coverage in the radius," Mr. Pagliughi said.

Verizon is trying to determine how a portable 4G LTE hot spot could work in an area "where a disaster had impacted Verizon service and there is no other way to get cellular coverage to that location," said Christopher Desmond, a principal engineer for the company. The trial in Cape May was the company's second in New Jersey and it reaffirmed the viability of the concept, Mr. Desmond said.

"We envision the ability for the aircraft to have a camera onboard to collect the photographic data and beam it to the ground," Mr. Desmond said, providing situational awareness at the scene and also at a command center. That, he said, would enable better collaboration between those inside and outside a disaster zone. https://www.nytimes.com/2018/04/06/nyregion/drone-cellphone-disaster-service.html



Trump administration seeks authority to intercept drone communications to thwart domestic attacks Michael Laris April 7



Citing a growing threat that terrorists will use drones for surveillance or as weapons, the Trump administration is asking Congress to give the Departments of Homeland Security and Justice the power to track, reroute or destroy the devices, according to a copy of the legislative proposal obtained by The Washington Post.

The <u>legislation</u> would free safety and security officials from those agencies, and their contractors, from laws against intercepting electronic communications that officials say have hamstrung their ability to protect sensitive facilities from increasingly cheap and powerful unmanned aircraft, which already number in the millions.

The full picture of which facilities would fall under the new authorities remains unclear. Those facilities would be subject to what the proposed legislation calls a "risk-based assessment" as well as regulations and guidance that would be shielded from disclosure under the Freedom of Information Act. <a href="https://www.washingtonpost.com/local/trafficandcommuting/trump-administration-seeks-authority-to-intercept-drone-communications-to-thwart-domestic-attacks/2018/04/07/20972886-3a70-11e8-8fd2-49fe3c675a89_story.html?utm_term=.4070992bddc0

Police using 'drone killers' to disable flying devices in emergency situations PHIL DIEHL APR 07, 2018

The Oceanside CA Police Department recently acquired a "drone killer," an electronic device that can disable a drone in the sky and force it back to the ground.

The need arose in December during northern San Diego County's Lilac fire, which destroyed more than 150 structures and forced thousands of residents to flee their homes. During the blaze, someone sent up a drone that forced aerial firefighting operations to cease for more than an hour to avoid a possible collision.

The search led officers to IXI Technology in Yorba Linda, a company that has been supplying high-tech electronic equipment to the U.S. military for 35 years, and a new device it released in 2017. The company agreed to donate one of their drone killers, worth about \$30,000.



The device, which looks like a gun, can be aimed like a rifle at a drone in the air. The 30-degree field of its beam and its range of almost half a mile make the target hard to miss. "It breaks the command and control between the drone and the operator," said Andy Morabe of IXI Technology. http://www.latimes.com/local/lanow/la-me-drone-killers-20180407-story.html

Boeing's MQ-25 Tanker Drone Offering Undergoes Tests Ahead of Source Selection Decision Jane Edwardson: April 09, 2018In: Industry News



<u>Boeing</u> has already conducted several tests of its proposed unmanned aircraft system for the <u>U.S. Navy</u>'s *MQ-25 Stingray* carrier-based aerial refueling tanker drone program ahead of the service's contract award decision, National Defense <u>reported Friday</u>.

"We have already demonstrated a lot of the functionality... We have done almost everything short of flying," Donald "BD" Gaddis, Boeing's

MQ-25 program director, told reporters Thursday. Gaddis said the <u>Naval Air Systems</u> <u>Command</u> intends to award a fixed-price contract by the end of summer 2018 to produce four aircraft as Chief of Naval Operations Adm. John Richardson aims to speed up the MQ-25 program's development timeline.

"Normally it takes NAVAIR about 18 months to do a source selection like this. ... They're going to do it in six months," he added. http://blog.executivebiz.com/2018/04/report-boeings-mq-25-tanker-drone-offering-undergoes-tests-ahead-of-source-selection-decision/

China joins Russia in development of rocket-launched reconnaissance UAV, says report Neil Gibson, London and Gabriel Dominguez, London - IHS Jane's Defence Weekly 03 April 2018

Russia's Tecmash Research and Production Group has teamed up with China to continue carrying out experimental design to develop a reconnaissance unmanned aerial vehicle (UAV) that is launched from inside a munition launched by the 9K58 Smerch multiple rocket system (MRS), Alexander Kochkin, the company's deputy CEO, was quoted by the TASS news agency as saying on 30 March.

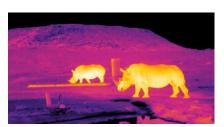
"Joint experimental design work with the Chinese side is under way," he said during the ArmHiTec-2018 defence exhibition in Armenia.

According to TASS, MRS manufacturer Splav, a subsidiary of Tecmash, announced in February 2017 that it had developed a project "on its own initiative" to create a UAV that can be



launched from inside a munition launched from the Smerch. http://www.janes.com/article/78990/china-joins-russia-in-development-of-rocket-launched-reconnaissance-uav-says-report

Astronomy and ecology come together in drone designed to tackle poaching problem Darren Quick April 4th, 2018



Infrared images of rhinos captured in field trials in South Africa of a new drone-based system (Endangered Wildlife Trust/LJMU)

Aerial technology has been paired with software and techniques used by astronomers in a system designed to

automatically detect and monitor wildlife in hard-to-reach areas, even at night when most poaching occurs.

The new system is the result of a collaboration between astrophysicists and ecologists at Liverpool John Moores University (LJMU). Building on machine-learning algorithms and astronomical detection tools developed through the open source Astropy Project, the system has been trained to recognize different types of animals in various landscapes and vegetation.

"With thermal infrared cameras, we can easily see animals as a result of their body heat, day or night, and even when they are camouflaged in their natural environment," explains says team member Dr Claire Burke. "Since animals and humans in thermal footage 'glow' in the same way as stars and galaxies in space, we have been able to combine the technical expertise of astronomers with the conservation knowledge of ecologists to develop a system to find the animals or poachers automatically." https://newatlas.com/animal-poaching-astro-ecology-drone/54066/

Israel deploys drones to drop tear gas on Gaza protesters AGENCIES and TOI STAFF 31 March 2018



A picture taken on March 30, 2018 shows a Border Police drone dropping tear gas canisters during clashes with Palestinian protesters near the border with Israel, east of Gaza City.



Israel on Friday used new technology to counter violent protests along the Gaza border, with Border Police using small drones to drop tear gas on Palestinian protesters.

A number of people were injured by the containers, which fell from a height of between 10 and 20 meters (30-60 feet), the AFP correspondent said. "It's a mini-drone which has the capability of flying over certain zones and certain areas and then letting go of tear gas in areas that we want to prevent protesters from reaching." https://www.timesofisrael.com/israel-deploys-drones-to-drop-tear-gas-on-gaza-protesters/

Archaeologists Used Drones to Find New Ancient Drawings in Peru Julissa Treviño SMITHSONIAN.COM APRIL 6, 2018

image: https://thumbs-prod.si-cdn.com/6JWwrl2Eg88MBVkro06tQtPY5I=/800x600/filters:no_upscale()/https://publicmedia.smithsonianmag.com/filer/d5/21/d5215530-eda3-4666-add6-47de6bf34484/nazca.jpg

With the use of drones, archaeologists in Peru have uncovered more than 50 new examples of Nazca lines in the Palpa province that likely would have been missed by the human eye and even satellites, reports Michael Greshko in a *National Geographic* exclusive on the discovery.

<u>Unesco</u> has called Nazca lines one of the "greatest enigmas" of archaeology. The works are created by moving stones to remove a top layer of soil and reveal lighter colored soil underneath, and more than a thousand of these ancient geoglyphs populate a 290 square mile span of the Nazca Desert in southern Peru.

Most of the newly found lines were created by the Nazca culture, which existed from between 200 to 700 C.E. But researchers believer that earlier civilizations carved some of the lines between 500 B.C. and 200 C.E. The lines hadn't before been spotted because of degradation and erosion. But drones have allowed researchers to find even the faintest signs of the geoglyphs. At altitudes of 200 or less, drones can see objects less than half an inch wide. https://www.smithsonianmag.com/smart-news/archaeologists-use-drones-capture-images-ancient-drawings-peru-180968716/

Terrawatch: scientists turn to drones to find raw materials Kate Ravilious @katerav Tue 3 Apr 2018

Metals such as copper, cobalt, platinum-group metals and rare-earth elements such as indium and germanium are in short supply. But now scientists in Germany are developing new ways to find these precious materials. Using drones equipped with special cameras and sensors,



scientists from the Helmholtz-Zentrum Dresden-Rossendorf (HZDR) in Dresden are analysing the way light bounces off underlying rocks, to discover metals deposits. Each mineral produces its own characteristic light reflection, due to the specific shape and size of its crystals. In addition, the scientists are developing a laser-beam sensor to identify minerals that glow brightly due to fluorescence.

These non-invasive methods avoid hillsides being carved up by diggers, and enable mining companies to use less disruptive and safer ways of extracting minerals. Writing in the <u>latest issue of the HZDR magazine</u>, Discovered, the scientists showcase how these techniques have enabled them to pinpoint rare-earth elements in Finland and Namibia. https://www.theguardian.com/environment/2018/apr/03/terrawatch-scientists-turn-to-drones-to-find-raw-materials

SUBSCALE SUPER CUB ADVANCES DRONE INTEGRATION April 2, 2018 By Juan Plaza

NASA is flying a subscale Piper Cub on a mission to help make drone flights beyond visual line of sight safe and routine.



The NASA MicroCub (µCub) is a Bill Hempel 60percent-scale Super Cub, modified to support research focused on the integration of unmanned aircraft into the National Airspace System (NAS).

NASA Armstrong's Subscale Research Lab team began flying the μ Cub in January, successfully demonstrating the aircraft's airworthiness. "Our focus on this

research is to support the development of regulations that will allow routine access for UAS in the NAS without the need for FAA Certificates of Authorization or special routes to conduct missions, and in general helping the FAA deal with flights beyond visual line of sight," said Davis Hackenberg, deputy project manager of the Subscale Research Lab.

"In addition to helping with UAS integration into the NAS efforts, the μ Cub is a configurable aircraft that can be modified and utilized for a variety of flight tests at NASA and will be instrumental in the development of a reliable <u>unmanned traffic management</u> (UTM) system," said Hackenberg.

The UTM platform being built by NASA and various industry partners will be capable of coordinating and analyzing inputs from dozens of sources, making valid and reliable



assessments of the local airspace environment, and communicating traffic data and other information to pilots in the area. https://www.aopa.org/news-and-media/all-news/2018/april/02/scale-super-cub-advances-drone-integration

Brazil's DECEA to integrate drone management within its ATM system April 9, 2018 Philip Butterworth-Hayes UAS traffic management news



The Department of Airspace Control is soon to implement new UAS traffic management concepts based on the organization's Air Space Access Request System aimed at the eventual integration of manned and unmanned aircraft in a single volume of airspace. A roadmap and schedule for such developments will be announced probably later this year by DECEA (Departamento de Controle do Espaço Aéreo).

Brazil has currently about 34,000 civil UAS registered with the SISANT/ANAC, 65% for recreational and 35% for commercial use. Most registered operators are individuals, with only 6% of those being companies. Around 40% of the total is based in Sao Paulo, while another 15% is based in Rio de Janeiro. Informed analysts, however, estimate that the actual total number is closer to 100,000.

Since its release in late 2016, SARPAS/DECEA has processed around 37.000 airspace access requests, 75% of which have been processed automatically, with a notification confirmation note being sent to operators immediately, and 17% within two days, with only 8% of all the cases requiring the issuance of a NOTAM.

The initial focus for civil aviation regulators has been on developing legislation and platforms for the registration and control of access to airspace by UAS, mainly small UAS at very low level. So far, say the authorities, there have been only a few non-fatal airspace violations and incidents reported to law enforcement agencies.

Brazilian regulators and industry are following closely the latest developments in unmanned traffic management, both UTM in the USA and U-Space in the European Union, recognizing the need for and the importance of standards for a concept of operations and for initial service elements, like data exchange, e-identification/authentication, geo-fencing, collision avoidance and separation management. http://www.unmannedairspace.info/uncategorized/special-report-brazils-decea-integrate-drone-management-within-atm-system/



Trump administration "seeks new laws to track, reroute or destroy drones" April 9, 2018 Philip Butterworth-Hayes Counter-UAS systems and policies



According to a copy obtained by *The Washington Post* – "The <u>legislation</u> would free safety and security officials from those agencies, and their contractors, from laws against intercepting electronic communications that officials say have hamstrung their ability to protect sensitive facilities from increasingly cheap and powerful unmanned aircraftIt would also give wide discretion to those working for the government. Those facilities would be subject to what the

proposed legislation calls a "risk-based assessment" as well as regulations and guidance that would be shielded from disclosure under the Freedom of Information Act."

"Overseas, ISIS, other terrorist groups, and criminal organizations use commercially available [unmanned aircraft systems] to drop explosive payloads, deliver harmful substances, and conduct reconnaissance," says a document accompanying the legislative text. "Law enforcement and homeland security professionals are gravely concerned that terrorists and criminals will use the nefarious tactics engineered overseas in the homeland."

At the end of March, Congresswoman Vicky Hartzler (MO-04) introduced H.R. 5366, the *Safeguarding America's Skies Act*, (http://www.unmannedairspace.info/counter-uas-systems-and-policies/new-congress-act-aims-allow-us-federal-agencies-shoot-drones/) which would allow the Department of Justice and the Department of Homeland Security to detect, track, and engage with drones that pose a security risk to agency facilities and assets. http://www.unmannedairspace.info/counter-uas-systems-and-policies/trump-administration-seeks-new-laws-track-reroute-destroy-drones/

10Apr18

MQ-25 Stingray Drone Purpose-Built to Marry Manned, Unmanned Nick Zazulia April 9, 2018



Lockheed Martin's MQ-25, shown here catching a wire to land on an aircraft carrier, uses the F-35's landing gear.

Manned and unmanned aircraft working in tandem is the arena where Lockheed Martin sees the upcoming MQ-25A Stingray breaking ground, according to Skunk Works head Rob Weiss.



Weiss stressed the importance of the MQ-25 being purpose-built while most tankers are derivatives of other designs, which, he said, generally leaves them compromised. Originally, Lockheed did look at re-purposing its canceled U-class surveillance drone, the Sea Ghost, but Weiss said that the Skunk Works team was unsatisfied.

The result is a built-from-the-ground-up flying-wing UAS designed to check all the Navy's boxes for range (Lockheed touts a 52% increase for an F-35C) and carrier-suitability and to leave room for future growth. http://www.aviationtoday.com/2018/04/09/mq-25-stingray-drone-purpose-built-marry-manned-unmanned/

Michigan Company Puts on FAA-Approved Drone Light Shows Betsy Lillian April 9, 2018



<u>Firefly Drone Shows</u>, a Michigan-based company that puts on drone light shows, says it is expanding its fleet to 200 custom-built drones and is booking for a variety of outdoor events this summer.

Founded by Kyle Dorosz and Ryan Sigmon, the company, <u>like Intel</u>, is one of only a few with Federal Aviation Administration (FAA) approval to put on these nighttime performances.

Firefly says it conducts pre-programmed light shows that are automated by a computer. The customized shows are an ideal alternative to traditional fireworks for corporate, private and special events, the company notes.



"We are able to create bright, impactful displays in the sky without the significant pollution or steep costs generally associated with fireworks," says Dorosz. https://unmanned-aerial.com/michigan-company-puts-on-faa-approved-drone-light-shows?utm_medium=email&utm_source=LNH+04-10-2018&utm_campaign=UAO+Latest+News+Headlines

FAA Seeks New LAANC Service Providers Betsy Lillian April 9, 2018

In October 2017, the FAA deployed LAANC (pronounced "LANCE") at several air traffic facilities to evaluate how well the prototype system functioned for drone operators who want to fly in controlled airspace, as well as for the facilities themselves. Last month, the agency



<u>announced</u> a nationwide expansion of the program, as well as its intention to seek more service providers.

The FAA is now considering agreements with additional entities to provide LAANC services. The period for new entities to apply will run from April 16 to May 16, and interested parties can find information on the application process here. The FAA notes this is not a standard government acquisition; there is no screening information request or request for proposals.

The nationwide beta test will roll out from April to September of this year. It will incrementally activate LAANC at nearly 300 air traffic facilities covering almost 500 airports.

The FAA expects LAANC will ultimately provide near-real-time processing of airspace authorization and notification requests for Part 107 drone operators nationwide. The system is designed to automatically approve most requests to operate in specific areas of airspace below designated altitudes. https://unmanned-aerial.com/faa-seeks-new-laanc-service-providers?utm_medium=email&utm_source=LNH+04-10-2018&utm_campaign=UAO+Latest+News+Headlines

11Apr18

Trump admin wants new powers to intercept drone communications – cites public safety as justification April 11, 2018 Feilidh Dwyer

A fear that consumer drones may used in attacks against Americans is reportedly driving the Trump administration to seek extra powers to intercept UAV communications.

The <u>Washington Post</u> reports that the Trump administration had requested for Congress to pass new bills empowering the Homeland Security and Justice departments to track, reroute or destroy drones.

The main times during which these new counter-drone powers would apply would be in cases where authorities believed an imminent threat to the safety of the public involved the use of a drone. The full set of circumstances where this proposal would apply is laid out in more detail here. The new powers would permit authorities to interrupt electronic communications controlling dangerous drones.

Critics of the legislation claim these powers could also be used by the government to access video feeds or politically sensitive information collected by the drones.



https://www.wetalkuav.com/trump-admin-citing-public-safety-wants-new-powers-to-intercept-drone-communications/

Russia has figured out how to jam U.S. drones in Syria Courtney Kube / Apr.10.2018

Four U.S. officials said Russia's signal scrambling has seriously affected military operations.



WASHINGTON — The Russian military has been jamming some U.S. military <u>drones operating in the skies over Syria</u>, seriously affecting American military operations, according to four U.S. officials.

The Russians began jamming some smaller <u>U.S. drones</u> several weeks ago, the officials said, after a series of suspected chemical weapons attacks on civilians in rebel-held eastern Ghouta. The Russian military was concerned the U.S. military would retaliate for the attacks and began jamming the GPS systems of <u>drones operating in the area</u>, the officials explained.

Jamming, which means blocking or scrambling a drone's reception of a signal from a GPS satellite, can be uncomplicated, according to Dr. Todd Humphreys, the director of the Radionavigation Laboratory at the University of Texas at Austin.



Humphreys, an expert on the spoofing and jamming of GPS, warns this could have a significant impact on U.S. drones, causing them to malfunction or even crash. "At the very least it could cause some serious confusion" for the drone operator on the ground if the drone reports an

incorrect position or is lost. https://www.nbcnews.com/news/military/russia-has-figured-out-how-jam-u-s-drones-syria-n863931

Airbus Unveils Drone For Inspecting Aircraft In Hangars April 10, 2018 News

Airbus is demonstrating for the first time a drone-based maintenance tool for use inside a hangar, reducing aircraft downtime and increasing the quality of inspection reports.

It is an automatic drone with a visual camera, a laser-based obstacle detection sensor, flight planner software and a software analysis tool. It is optimized for inspecting the upper parts of the aircraft fuselage.



Following a predefined inspection path, the drone captures the required images with its on-board camera. Pictures are then transferred



to a PC database for analysis using a software system. This allows the operator to localize and measure visual damage on the aircraft's surface by comparing it with the aircraft's digital mock-up. The software automatically generates an inspection report.

http://uasweekly.com/2018/04/10/airbus-unveils-advanced-inspection-drone-for-inspecting-aircraft-in-hangars/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_newsletter_2018_04_10&utm_term=2018-04-10

12Apr18

Virginia Governor Announces Funding for UAS Training Program Betsy Lillian April 11, 2018

Gov. Ralph Northam, D-Va., has <u>announced</u> \$76,000 in funding for an unmanned aircraft systems (UAS) initiative in the Alleghany County region of Virginia.

The project, entitled "Enhancing the Region through New Technology for Unmanned Systems," will implement a new drone technology training program at Dabney S. Lancaster Community College to capitalize on the "Alleghany Highlands Drone Zone Initiative," a business accelerator program to support enterprises in the UAS industry in Alleghany County.

This new program will establish a career pathway, beginning with project-based learning opportunities for high school students and extending to four-year degree attainment through partnerships with other higher-education institutions.

Last year, U.S. Sens. Mark R. Warner and Tim Kaine, both D-Va., announced \$100,000 in funding from the Appalachian Regional Commission to promote the UAS industry in the region.

The Dabney S. Lancaster Community College grant is one of five regional projects funded through GO Virginia (Growth and Opportunity for Virginia) totaling \$1,115,300. https://unmanned-aerial.com/virginia-governor-announces-funding-for-uas-training-program?utm_medium=email&utm_source=LNH+04-12-2018&utm_campaign=UAO+Latest+News+Headlines



Loveland Rolls out 'Drone Assist' for On-Demand Property Inspections Betsy Lillian April 10, 2018



Utah-based Loveland Innovations has launched Drone Assist, a nationwide, on-demand drone inspection service that combines professional drone pilots with Loveland's IMGING solution.

The service is designed to augment workforces during times of increased inspection demands, such as after large natural disasters, but

it is also effective for individual inspections during which insurance carriers may have less coverage or may need help on steep and complex roofs, the company explains.

Insurers can define what they want inspected at a property and assign the job to a Drone Assist pilot. Reports are typically available within 72 hours of request. The cost is \$200 per address. https://unmanned-aerial.com/loveland-rolls-out-drone-assist-for-on-demand-property-inspections?utm_medium=email&utm_source=LNH+04-12-2018&utm_campaign=UAO+Latest+News+Headlines

UN's ICAO Issues Call for UAS Airspace Management Solutions Betsy Lillian April 11, 2018



ICAO, a specialized agency of the United Nations, has begun consultative work needed to establish low-altitude traffic management guidance for domestic unmanned aircraft systems (UAS).

Recognizing that an agreed global approach will greatly assist businesses and others in launching their UAS services with suitable levels of investment confidence and operational safety, ICAO is now convening its second DRONE ENABLE event for Sept. 13-14 in Chengdu, China.

The event's focus will be on exploring new solutions to help globally coordinate the development of drone activities and safely integrate UAS traffic management systems and existing conventional air traffic management systems.

In preparation for the Chengdu event, ICAO has also issued a second request for information (RFI) to expand on the guidance material that was initiated after its first DRONE ENABLE in 2017. Interested parties can contribute to the 2018 ICAO RFI https://unmanned-aerial.com/uns-icao-issues-call-for-uas-airspace-management-



solutions?utm_medium=email&utm_source=LNH+04-12-2018&utm_campaign=UAO+Latest+News+Headlines

Drone Start-Ups Win Big in New York State Betsy Lillian April 11, 2018



Gov. Andrew M. Cuomo, D-N.Y., has announced that the winner of the \$1 million grand prize for Round II of GENIUS NY – an unmanned aircraft systems (UAS) business competition in central New York – is Fotofike, a team from Switzerland.

Fotokite combines aerial and ground-based robotics with patented

flight control algorithms to create a kite-like tethered drone system, which uses a tether to fly for 24 hours fully autonomously.

GENIUS NY, a yearlong business accelerator, awarded <u>six finalist teams</u> a total of nearly \$3 million at its finals event on Monday night, including prizes and investments of \$1 million, \$600,000 and \$400,000 and three \$250,000 awards. Participants are required to operate their business in central New York for at least one year

GENIUS NY is funded by Empire State Development (ESD) and administered by The Tech Garden and CenterState CEO. It also offers company stipends, housing, resources, programming and networking opportunities. https://unmanned-aerial.com/drone-start-ups-win-big-in-new-york-state?utm_medium=email&utm_source=LNH+04-12-2018&utm_campaign=UAO+Latest+News+Headlines

13Apr18

Drones vs Satellites: Competitive or Complimentary? Jonathan Barnes April 11, 2018



Whether it makes sense to use one or the other or both is a question of the tasks that need to be performed and the specific data that needs to be obtained. There are instances when a drone just won't do the job as well as a satellite, but there are also plenty of instances when it would be foolish to

try and utilize a drone if satellite data is available.

Choose Satellite When...A "macro" view of the terrain is needed.

Choose Drone When... A "micro" take of the land is apropos and scaling up doesn't matter.



Choose Satellite When... A large amount of data must be gathered quickly.

Choose Drone When...It makes sense to do so because regulations have opened up a new value proposition.

Choose Both When... A wise opportunity to do so presents itself.

"Companies like Airbus Aerial are trying to merge their fleets of satellites with drone data to provide their clients with a holistic approach, tailored to their needs. This is a big opportunity and if it can be done effectively then there are big wins on the horizon for plenty of companies who are investigating these types of aerial data," Smith said.

It's exciting to think about what it will mean to see a solution that can combine drone data with satellite imagery in a powerful way. Even after that sort of capability is developed, there will still be cases where it makes sense to use one approach over the other. A more seamless integration of drone data with satellite data will help operators focus on how these solutions can complement one another. https://www.expouav.com/news/latest/drones-vs-satellites-competitive-

complimentary/?utm_source=informz&utm_medium=email&utm_campaign=newsletter&utm_content
=newsletter

Drone Pilot Surprised to Film Civil War Ship Jason Reagan April 09, 2018



When Brent Garlington decided to launch his drone while on a beach vacation, the North Carolina man never dreamed he would find a piece of Civil War history.

The Fayetteville native captured unique footage while filming via UAV over the Lockwood Folly Inlet between

Oak Island and Holden Beach last week where he captured footage of a wrecked Civil War steamship. State officials later identified the vessel as the Bendigo, an ironclad Confederate blockade runner.

Drones have helped researchers uncover all manner of historical and archaeological sites. In 2015, a thermal camera-mounted drone revealed structures from an ancient settlement site of the <u>Ancestral Puebloans</u> in New Mexico over the course of four 11-minute flights.



In Jordan, archaeologists used drones to map areas that had been looted in a <u>Bronze Age</u> cemetery.

In Britain, the Cambridge Archaeological Unit of the University of Cambridge deploys UAS to survey the best <u>excavation sites</u> at Must Farm in Cambridgeshire. The site has been called "British Pompeii" due to well-preserved Bronze Age dwellings.

https://dronelife.com/2018/04/09/amateur-drone-pilot-surprised-film-civil-war-ship/

AUVSI XCELLENCE Humanitarian Award Finalists Announced Malek Murison on April 10, 2018

The Association for Unmanned Vehicles Systems International (AUVSI) has announced eight finalists from the drone community for the inaugural AUVSI XCELLENCE Humanitarian Award.

The award, sponsored by DJI, recognizes five organizations and/or individuals that have used drone technology for humanitarian or philanthropic good. Five winners will be chosen from the shortlist and receive a share of \$25,000 to put towards the continuation of their humanitarian efforts.

The eight finalists have all led the way in groundbreaking efforts to improve the lives of others using drones, from natural disaster management to medical assistance and search and rescue:

- *Aeryon Labs Inc.*, Aeryon SkyRanger UAS Provides Critical Aerial Intelligence to First Responders in Saint Maarten in the Wake of Hurricane Irma (Canada)
- **AnsuR Technologies**, GEO-VISION Integrating Drones for Situational Awareness in Disaster Management (Sweden)
- **ONG DroneSAR Chile**, Emergency Response Team and Humanitarian Aid Through the Use of Drones (Chile)
- **DroneSAR**, UAV Search & Rescue (SAR) Solution Executing (Amsterdam)
- Autonomous Aerial, Search and Delivering Live Drone Data to Augment First Response Efforts (Ireland)
- *Gene Robinson, Wimberley Fire Rescue, "First to Respond" Bringing UAS to Search and Rescue 2005 2018 (US)*
- Nepal Flying Lab, Drone Hazard & Vulnerability Mapping in Nepal (Nepal)



- WeRobotics, Drones for Disease Vector Control (Switzerland)
- **Zipline International**, Zipline's Medical Drone Delivery Operation in Rwanda (Rwanda)

The <u>Humanitarian</u> Award winners will be announced at a special ceremony during AUVSI XPONENTIAL 2018 next month, on Thursday, May 3rd at the Colorado Convention Center in Denver. https://dronelife.com/2018/04/10/auvsi-xcellence-humanitarian-award-finalists-announced/

13Apr18

Long-Range Coast Guard Drone to Undergo Tech Demo Calvin Biesecker | April 12, 2018



The U.S. Coast Guard has issued a draft solicitation related to a forthcoming technology demonstration of long-range, ultra-endurance unmanned aircraft systems (UAS) for potential use finding and tracking illegal drug and migrant activities in the transit zone.

Awards will be made during fiscal year 2018 and the demonstrations will be held in fiscal year 2019. The final solicitation for the technology demonstration is slated for release April 13.

Congress in fiscal year 2017 appropriated \$18 million for the Coast Guard to test and evaluate long-range, ultra-endurance UAS for intelligence, surveillance and reconnaissance missions in the source and transit zones. The statement of work, released March 26, said minimum performance requirements include 24-hour endurance, operations at a 15,000 feet and various maritime sensors, including electro-optic and infrared full-motion video, surveillance radar, radio frequency and direction finding, and tactical communications radio and datalink. http://www.aviationtoday.com/2018/04/12/long-range-coast-guard-drone-undergo-tech-demo/

Army selects 7 firms for potential \$249M UAS contract Mary-Louise Hoffman April 12, 2018 Contract Awards



Seven companies have won spots on a potential five-year, \$248.5 million contract to provide multiple unmanned aircraft systems to the <u>U.S. Army</u>.

The <u>Defense Department said Wednesday</u> contractors will compete for task



orders covering long-range reconnaissance surveillance and medium-range mobile UAS; a government-owned tactical open architecture controller system; and spare and repair parts.

Nine bids were received by the Army Contracting Command via an online-based solicitation.

Contract work is scheduled to occur through March 31, 2023.

The awardees are:

- AeroVironment (Nasdaq: AVAV)
- Altavian
- Blackbar Engineering
- Elbit Systems' (Nasdaq: ESLT) EFW subsidiary
- GECO
- Innovative Automation Technologies
- Strata-G Solutions

https://www.govconwire.com/2018/04/army-selects-7-firms-for-potential-249m-uas-supply-contract/