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Coast Guard Awards Contract To Procure Small UAS Capability For National Security Cutters June 7, 2018



The Coast Guard today awarded a contract to Insitu Inc. of Bingen, Washington, for procurement of small unmanned aircraft system (sUAS) capability for the national security cutters (NSCs) June 6. The service contract covers installation and deployment of sUAS for approximately 200 hours per 30-day operational patrol period.

Installations of sUAS capability on NSCs are planned at a rate of about two per year. Total value of the contract including the seven option years is approximately **\$117 million**.

The Coast Guard is employing a contractor-owned contractor-operated strategy for this procurement, where Insitu will deploy equipment, pilots and logistics support onboard the NSC to operate sUAS. The Department of Defense has implemented a similar strategy for maritime UAS services for 700,000+ flight hours.

The Coast Guard is acquiring sUAS capability as a cost-effective strategy to expand the surveillance range of NSCs, using technology that can remain airborne for at least **12 continuous hours per flight**. The sUAS will conduct surveillance, detection, classification and identification operations; it will also support prosecution by providing real-time imagery, data, target illumination, communications relay and other capabilities to the NSC and other government platforms as needed.

Pre-procurement activities included the employment of sUAS technology for drug interdiction, living marine resources and search and rescue missions during three patrols on Coast Guard Cutter Stratton, an NSC based in Alameda, California. During the more than 700 flight hours completed on those patrols, sUAS capability was involved in **17 drug interdictions resulting in the confiscation of 10,202 kilograms of contraband**. Data gathered from the Stratton assessment patrols were used to refine the concept of operations and request for proposal requirements. https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Acquisitions-CG-9/Newsroom/UAS_060618/



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The contract award marks a major milestone for the acquisition process. "The sUAS has already proven itself to be a transformational technology on the technology employment, and the deployment of this capability to the entirety of the NSC fleet is an incredibly important first step in realizing the Coast Guard's vision of fleet-wide UAS implementation," said Cmdr. Daniel Broadhurst, who served as unmanned aircraft systems division chief in the Office of Aviation Forces. "The Coast Guard is excited to award the contract for the service's first class-wide sUAS to Insitu." https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Acquisitions-CG-9/Newsroom/UAS_060618/

FAA must bolster drone risk management efforts: GAO Gloria Gonzalez 5/24/2018

The Federal Aviation Administration should improve its risk management efforts related to



drone safety, according to a report by the U.S. Government Accountability Office.

FAA's information on the extent of unsafe use of small unmanned aircraft systems, more commonly known as drones, in the national airspace system is limited, according to the GAO report published Thursday. Although the agency collects data on several types of safety events involving small UAS, the **accuracy and completeness of the data are questionable**, the report found.

Since 2014, for example, more than 6,000 sightings unmanned aircraft systems — often flying near manned aircraft or airports — have been reported to the FAA, but agency officials told the GAO that they cannot verify that the drones were involved in most of the sightings.

The FAA is taking steps to improve its data, including developing a web-based system for the public to report any drone sightings perceived to be a safety concern and surveying UAS users on their operational activity, but the agency did not have time frames for completing these efforts. The FAA is also evaluating technologies for detecting and remotely identifying UAS, which could improve data on unsafe use.

"Improved risk management practices would help FAA determine whether additional actions are needed to ensure the safety of the national airspace and provide FAA and other decision-makers with confidence that FAA is focusing on the most critical safety risks posed by small UAS," the report said.

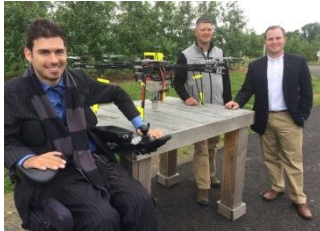
<http://www.businessinsurance.com/article/20180524/NEWS06/912321520/Federal-Aviation-Administration-must-bolster-drone-risk-management-efforts-GAO>



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Drone used to pollinate Central New York apple orchard Jun 7 Rick Moriarty

rmoriarty@syracuse.com



LaFayette, N.Y. -- The Beak & Skiff Apple Orchard in LaFayette has become **the first apple orchard in the world to pollinate its trees using a drone**, according to the start-up company that developed the technology.

Dropcopter, a start-up company participating in GENIUS NY business accelerator program at the Syracuse Technology Garden, used a hexacopter drone to spray pollen on about five of Beak & Skiff's 300 acres of apple trees.

The technology could become very useful for orchard owners because of the [decline in the bee population](#) in the past 25 years. With fewer bees around, it becomes more difficult to pollinate orchards during the short period in the spring when pollination can happen.

Peter Fleckenstein, a partner and director of fresh fruit operations at Beak & Skiff, said the technology could be especially useful during cold spring days, when bees are not active. If those cold days occur during the critical pollination period, the orchard could have a bad growing season, he said. https://www.syracuse.com/business-news/index.ssf/2018/06/drone_used_to_pollinate_central_new_york_apple_orchard.html

Island University's LSUASC Tests New UAS Sense and Avoid Technology June 06, 2018



PORT MANSFIELD, Texas – The Lone Star UAS Center of Excellence and Innovation (LSUASC) at Texas A&M University-Corpus Christi continues its work with NASA and the Federal Aviation Administration in developing regulations for Unmanned Aircraft Systems (UAS) flight at low-altitude. As the third step in a four-part project, [LSUASC](#) completed more than 80 flights in late May at the Charles R. Johnson Airport in Port Mansfield, which involved **flying a manned Cessna 182 airplane toward a piloted UAS**.

This latest stage of the multi-year project focused on testing the effectiveness of UAS detect and avoid technology in a **beyond visual line-of-sight** setting. The new technology works by creating an invisible "bubble" around the UAS. If the drone senses something entering into this



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“bubble,” such as a manned aircraft, the UAS will send information to the drone operator and move away from that intrusion.

LSUASC operators used three different technologies which worked together to inform researchers at NASA and LSUASC operators of the drone’s location when it was beyond visual-line-of-sight. The three technologies included ADS-B transponders used by manned air traffic to identify aircraft, a ground-based mast-mounted radar set, and an air-borne radar attached to the drone. http://www.tamucc.edu/news/2018/06/060618_NASA_UTM_Update.html#.Wxw_X-4vx0z

Drones for good: UAV fleet help combat plastic pollution plaguing world’s oceans June 7, 2018 Feilidh Dwyer



Ten years ago British scientist Peter Kohler was in the middle of the South Pacific ocean in what he described to [Digital Trends](#) as “pure paradise” when he caught a glimpse of just how much plastic was scattered in the water.

It was this experience that set him on the journey to years later found [a charity to help clean up the oceans called Plastic Tide](#). Plastic Tide harness cutting edge drone and algorithm technology to create an open source map of the plastic pollution problem, in the UK and beyond. “One of the biggest challenges we face it that of the millions of tones of plastic that wash into our oceans every year, we can only account for just one percent of where that ends up.



Plastic Tide founder Peter Kohler in the midst of a beach cleanup.

This problem is an extremely serious one that is having a devastating impact on our marine life and beaches. While floating in the ocean, plastic emits a chemical signature similar to that of plankton and other food sources, making it an attractive target for birds and fish. Birds and fish swallow bits of plastic which, in turn, often fills up their bellies leading to either their stomachs exploding or them to starving to death. As [National Geographic has pointed out](#), the plastic toxins from microplastics also eventually makes their way up the food chain to humans.

Plastic Tide’s drones survey beaches and bodies of water to quantify the scale of the problem. Software onboard the drones use algorithms to identify where the plastic is located. At the beginning of April last year the team set out on a [3200 mile journey around the UK](#) in an



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attempt to gather up to 30,000 images from beaches around the country.

<https://www.wetalkuav.com/drone-fleet-help-tackle-plastic-pollution-on-uk-beaches/>

Making smart cities a reality with integrated drone solutions EMMA CALDER JUNE 7, 2018



With programmes being introduced around the world to spearhead drone integration, including Nesta's Flying High Challenge in the UK and the FAA and Department of Transport's pilot programme in America, it would seem that commercial drones in urban areas are on the brink of becoming reality.

In the UK, Nesta is driving the march for smart cities with its Flying High Challenge, a programme designed to develop use cases across **five cities and regions in the UK**.

Nishita Dewan, the lead on the Flying High Challenge, said: "At this level we're not engaging with the national public, but through cities. We are engaging with local communities, and we're trying to understand the specifics around the concerns and how we can make sure that when we do the granular research around the use cases, we try and address some of those concerns.

"Our goal is to help shift public sentiment from a negative place to a neutral place to hopefully more of a positive place." http://www.commercialdroneprofessional.com/depth-making-smart-cities-reality-integrated-drone-solutions/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-263946-Commercial+Drone+Professional+DNA+-+2018-06-08

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Kitty Hawk's Ultralight Flyer Enters Market MARY GRADY



Kitty Hawk's new version of its eVTOL Flyer is now available for sale, the company announced this week, and since it's classified as an ultralight by the FAA, no pilot's certificate is required to fly it. The aircraft, revealed on Wednesday, is much sleeker than the experimental version, and is equipped with 10 propellers

and two pontoons. A single seat is provided for the pilot, and the aircraft is controlled with just a joystick and a power lever. It can fly for about 20 minutes. No price has been revealed, but the company is taking orders at its website. A CNN reporter with no prior flight training



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said this week she took the aircraft for a solo flight after a 90-minute training session. Sebastian Thrun, Kitty Hawk's CEO, told CNN he hopes eventually the training will take only five minutes. "If it's less than an hour, it opens up flight to pretty much everyone," Thrun said.

The aircraft can fly up to 20 MPH, according to the company, but beginning pilots are capped at 6 MPH. The company already has conducted about 1,500 flights at its base on Lake Las Vegas in California. As an ultralight, the aircraft is restricted to flight only above uncongested areas. <https://www.avweb.com/eletter/archives/101/4078-full.html?ET=avweb:e4078:2565185a:&st=email#230934>

CACI Subsidiary to Help Navy Deploy Counter-UAS Tech to Government Sites

Nichols Martinon: June 08, 2018In: Industry News



A [CACI International](#) subsidiary has received a one-year, **\$48.6 million** contract from the [U.S. Navy](#) to help the Naval Air Systems Command's AIRWorks division deploy platforms intended to **counter unmanned aerial systems**.

Six3 Advanced Systems will support the AIRWorks Rapid Development Capabilities Integrated Product Team in efforts to implement new and existing counter-UAS equipment to government facilities that help safeguard national security assets, the [Defense Department](#) [said Thursday](#). Work under the indefinite-delivery/indefinite-quantity contract includes integration of hardware, software and command-and-control systems, modeling and simulation services.

Six3 will perform work through May 2019 in California, Washington D.C., Virginia, Washington, Florida, Maryland, Arizona, Utah and other locations outside the continental U.S.. <http://blog.executivebiz.com/2018/06/caci-subsiary-to-help-navy-deploy-counter-uas-tech-to-government-sites/>

GE Launches UAS Traffic Management Tech Business

Jane Edwardson: June 08, 2018In: Industry News



[General Electric](#) has unveiled a new company to help build **traffic management systems** designed to support the integration of unmanned aircraft systems into the national airspace. [AIRXOS](#) operates as a wholly owned subsidiary of GE and has been tapped to serve as a partner on several programs to support the development of UAS traffic management platforms.



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The Transportation Department has selected AiRXOS to work with the cities of San Diego and Memphis and the Choctaw Nation of Oklahoma to develop UTM systems and manage drone operations across urban settings and beyond-visual-line-of-sight environments as part of the *Unmanned Aircraft Systems Integration Pilot Program*.

AiRXOS will collaborate with CAL Analytics, Gryphon Sensors and Ohio State University's College of Engineering to develop a UTM platform for the *U.S. 33 Smart Mobility Corridor* to facilitate the transmission of drone tracking and detection data to the Ohio Department of Transportation's traffic management center.

The GE subsidiary will set up an office in Syracuse, N.Y., to support its collaboration with the Northeast UAS Airspace Integration Research Alliance.

AiRXOS also has teamed up with NASA on the *Technical Capability Level* testing initiative and has submitted an application for the *Low Altitude Authorization and Notification Capability* program to ensure safety of drone operations.

<http://blog.executivebiz.com/2018/06/ge-launches-uas-traffic-management-tech-developer-airxos/>

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Cape Elizabeth holds off on rules for drones on town property June 10 JOCELYN VAN SAUN THE FORECASTER



CAPE ELIZABETH ME — Rather than create a new set of regulations for using airborne drones on town-owned property, the Town Council hopes to educate people about existing federal rules governing the devices.

In a memo to the council, attorney Michael Hill said municipalities in other states have implemented prohibitions on launching and flying drones over municipal parks, with the exception of use by law enforcement or emergency services. However, he said, some of those ordinances have been successfully challenged.

For now, councilors agreed they **should learn more about regulations and how they're enforced**, what operators are required to do before launching a drone, who should be called with concerns about drone use, and what police can do to help ensure federal law is being upheld. This information, the council said, could be shared with the public via educational handouts distributed by park rangers. <https://www.pressherald.com/2018/06/10/cape-elizabeth-councilors-hold-off-on-rules-for-flying-drones-on-town-owned-property/>



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Senate Sends Trump Message on Drones, Transit in Spending Bill June 8, 2018

Shaun Courtney

The Transportation Department shouldn't divert funds from congressionally mandated transportation programs to pay for the agency's new drone pilot program, according to the Senate Transportation-HUD spending bill committee report.

The drone program partners state, local and tribal entities with private businesses to test unmanned aircraft systems operating beyond the line of sight, at night, over populated areas, and for package delivery, among other pilot programs.

The Transportation Department failed to notify or consult the appropriations committees before initiating the program, the report says. The agency would be required to **provide a report to the House and Senate Appropriations Committees** on the annual cost of the drone program before making any additional drone pilot agreements.

<https://about.bgov.com/blog/senate-sends-trump-message-drones/>

IAI develops ground-to-air robot system for border surveillance SHOSHANNA

SOLOMON 10 June 2018



Israel Aerospace Industries (IAI) has developed a new hybrid robotic system for reconnaissance and surveillance of borders that combines land and aerial capabilities.

The system's design is combines a ground robot and a small drone: the RoBattle UGV is a robotic terrain-vehicle that has advanced maneuverability capabilities. The vehicle is designed to handle missions under tough conditions and has an advanced autonomous system that lets the vehicle orient itself in the field with real-time 3D mapping and decision support systems.

The RoBattle drives autonomously between points of interest to perform a variety of objectives: observation, detection and attack. In addition, the vehicle sends real-time video on demand, and alerts to any irregularities in real time to command and control centers.

<https://www.timesofisrael.com/iai-develops-ground-to-air-robot-system-for-border-surveillance/>



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Award-winning Smart Drones to Take on Illegal Fishing June 09, 2018 Reuters



Fish are seen in a fish market near the canal of Port Said, Egypt

LONDON — Drones guided by artificial intelligence to catch boats netting fish where they shouldn't were among the winners of a marine protection award on Friday and could soon be deployed to fight illegal fishing, organizers said.

The award-winning project aims to help authorities hunt down illegal fishing boats using drones fitted with cameras that can monitor large swaths of water **autonomously**.

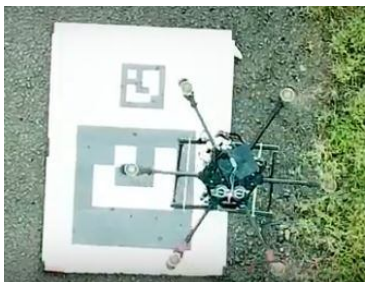
The National Geographic Society awarded the project, co-developed by Morocco-based company ATLAN Space, and two other innovations \$150,000 each to implement their plans as it marked World Oceans Day on Friday.

The aircraft can cover a range of up to 700 km (435 miles) and use artificial intelligence (AI) technology to drive them in search of fishing vessels. Once the drone detects something, it goes there and identifies what it's seeing. The technology, which is to be piloted in the Seychelles later this year, was more effective than traditional sea patrols and allowed coast guards to save money and time.

AI allows the drones to check a boat's identification number, establish whether it is fishing inside a protected area or without permit, verify whether it is known to authorities and count people on board. If something appears to be wrong, it can alert authorities.

<https://www.voanews.com/a/award-winning-smart-drones-to-take-on-illegal-fishing/4431489.html>

Flytbase launches computer-vision-based accurate drone landing system June 8, 2018 Philip Butterworth-Hayes UAS traffic management news



Flytbase (<https://blogs.flytbase.com/precision-landing-solution/>) has announced the launch of FlytDock, a smart vision based automated precision target landing solution compatible with a wide range of drones. It offers the ability to autonomously land or hover a drone over a **visual target** for delivery, docking station, warehouse or asset inspection, **even in GPS-denied environments**. This intelligent plugin utilizes [computer vision](#)

[techniques](#) and dedicated landing algorithms to precisely align, approach and land the multirotor on the ground.



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"The issue arises when trying to attempt an autonomous multirotor landing, solely assisted by the GPS, as it always comes with an error radius of a few meters, often called the 'last 10 ft problem', where traditional GPS is not accurate enough to navigate the drone precisely to the landing location. This is a major issue, as while working with relatively small objects which are often less than a meter in size, the error margin offered by a GPS-based landing solution is unacceptable. Further issues arise when the landing pad/docking station is in motion, or there are multiple landing sites, as the higher precision required to land the UAV in such cases, simply cannot be delivered by a GPS guided system. IR-beacons are affected by ambient conditions and need power on the landing site, and RTK-GPS is complex to setup, requires additional infrastructure and still does not provide the desired performance."

FlytDock consists of an onboard module which uses a downward looking monocular camera to detect fiducial markers. These markers (ArUco Tags) can be printed and used as landing sites. There is no infrastructure/electronics required on the landing site, making it easy to deploy at scale. The pose is estimated using the tag size and calibrated camera information. No other equipment, such as lidar or rangefinder, is required, as the altitude and location of the landing site are found just using the pose estimation of these markers. The onboard controller maneuvers the drone, precisely to the desired landing site using [FlytAPIs](#).

<https://www.unmannedairspace.info/uncategorized/flytbase-launches-computer-vision-based-accurate-drone-landing-system/>

Peninsula researchers, tech firms awarded grants Tara Bozick Contact Reporter Daily Press June 8, 2018

Gov. Ralph Northam announced \$2.7 million in funding in support of 34 Commonwealth Research Commercialization Fund awards in six industries: biosciences and medical technologies, cyber security, clean energy, water quality, data analytics and **unmanned systems**



Adaptive Aerospace Group in Hampton was awarded \$50,000 from the Small Business Innovation Research matching grant program to develop high-integrity software for unmanned aircraft beyond visual line-of-sight operations that would meet [Federal Aviation Administration](#) standards, said research and development engineer Jesse Couch. The software is for programmed aircraft rather than remote-controlled aircraft.

The firm, which often works on research projects alongside [NASA](#) Langley scientists through subcontracts, would leverage available NASA-verified software, Couch said. The project also



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seeks to develop tools to analyze the software. <http://www.dailypress.com/business/dp-tidewaterbiz-business-grants-20180607-story.html#nws=true>

UNICEF Innovation Funds for Drone Startups 2018 Campus Varta June 8, 2018

Home Youth Mauka Grants Youth Mauka

Application are open for the UNICEF Innovation Funds for Drone Startups 2018. The UNICEF Innovation Fund is looking to make up to **\$100K equity-free investments** to provide early stage finance to for-profit technology start-ups that have the potential to benefit humanity through the use of drones.

Seed funding: The Fund provides \$50- \$100,000 in equity-free seed funding. The money is intended for prototype testing and validation.

Product and technology development: Selected startups will receive technical assistance from the UNICEF Ventures team to help validate and improve their solutions.

Business Growth: The Fund taps into a network of mentors who help startup teams develop their business model and strategy to grow their company and ultimately profit.

Networks and platforms: UNICEF Ventures has a Drones lead and data science team with access to corporate and academic partnerships and use cases that selected drones start-ups can benefit from.

Maximize impact: As the world's leading organisation for children, UNICEF has a network of experts and partners across its Country Offices who can provide geographically localized advice and partnerships needed to reach more users.

Drone Corridor: Selected start-ups will have access to the **UNICEF Drone corridor in Malawi** providing the physical space for testing their solutions. Data from peer companies testing in the **three drone corridors** where UNICEF is present will be made available.

- You must be registered as a private company in a [UNICEF programme country](#);
- You are working on open source technology solutions or willing to be open-source under the following licenses or their equivalent: BSD (software), CERN (hardware), or CC-BY (content);
- You have an existing prototype of the solution with promising results from initial pilots;
- Your solution has the potential to positively impact the lives of children.



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Deadline: July 22, 2018 <https://www.campusvarta.com/youth-mauka/unicef-innovation-funds-drone-startups-2018/>

First air-traffic-controlled drone flights at Germany's largest airport BUSINESS NEWS EMMA CALDER JUNE 11, 2018



A Berlin-based company has successfully carried out its first successful drone test flights at Frankfurt Airport to provide a more efficient construction progress monitor of the new terminal.

The Multirotor drone was fitted with specialised solutions to prepare it for use at the international airport. The company and the airport will explore how to use drones and other autonomous vehicles to make operations safer, more economic and more efficient.

"In addition to construction monitoring, **a wide variety of airport operations** such as automatic perimeter surveillance, runway checks for FOD (Foreign Object Debris) or the calibration of navigation aids such as approach lighting systems and instrument landing systems can be made safer, more cost-efficient and greener with the use of drones.

Other airport operators from Europe and the United States have also shown a 'strong interest' in cooperating with Multirotor, according to the company.

http://www.commercialdroneprofessional.com/first-air-traffic-controlled-drone-flights-germanys-largest-airport/?utm_source=Email+Campaign&utm_medium=email&utm_campaign=45819-264149-Commercial+Drone+Professional+DNA++2018-06-11

Headwall Integrates Hyperspectral and LiDAR Aboard UAS Platforms June 11, 2018 Mapping and Surveying



Headwall has introduced advanced sensor payloads consisting of hyperspectral sensors and LIDAR for deployment on Unmanned Aerial Vehicle (UAV) platforms. Through the fusion of spectral imaging data and 3D LIDAR output, Headwall continues to provide new industry-leading capabilities for addressing critical remote sensing applications ranging from civil and military infrastructure inspection to crop science applications requiring discrete solutions for crop monitoring.

The Headwall payload consists of a Hyperspec® spectral imager, a LIDAR unit, a UAV, a high-performance GPS/IMU, and the associated software for data acquisition and workflow



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processing for exploitation. The combination of hyperspectral and LiDAR is especially powerful because the entire data set can be acquired on inexpensive UAV platforms with both sensor instruments operating simultaneously. Headwall's software will allow for the control of both instruments, utilize the Digital Elevation Map for image creation, and allow for the merging of spectral datasets with the 3D point cloud. http://uasweekly.com/2018/06/11/headwall-integrates-hyperspectral-and-lidar-aboard-uas-platforms/?utm_source=newsletter&utm_medium=email&utm_campaign=uasweekly_newsletter_2018_06_11&utm_term=2018-06-11

A SINGLE DRONE HELPED MEXICAN POLICE DROP CRIME 10 PERCENT JACK

STEWART TRANSPORTATION 06.11.18



Police in Ensenada, Mexico, have been using a DJI drone to cut down response times to emergency calls, and it has helped them make hundreds of arrests.

IN ENSENADA, A Mexican city about two hours south of Tijuana, a new crime fighter has taken to the skies. It's a [drone](#). And over a **few months** on patrol, it's had quite the impact. The city's police department claims the solitary DJI

Inspire 1 Quadcopter led to **more than 500 arrests and a 10 percent drop in overall crime rates, with a 30 percent drop in home robberies.**

In Ensenada, the police present their use of the drone as an unmitigated success. "It's helped with reducing response times and also catching people when they do something illegal," says Jesus Ramos Avendaño, CTO of the Ensenada police force.

Over four months, Avendaño's department flew an average of 25 missions a day (more than 1,600 total), deciding where to fly based on 911 call volumes. Operating from a local control room, the police used software developed by California-based Cape, which automates much of the flying process, including takeoffs and landings. Any authorized officer can grab a feed of the video streaming off the drone, from their desk or while out in the field.

<https://www.wired.com/story/ensenada-mexico-police-drone/>



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Finnish Government Tests Successful Drone UTM Jason Reagan June 10, 2018



A recent test at a Finland airport showed the continuing effectiveness of unmanned traffic management solutions.

In May, Spanish company CanardDrones partnered with aerial regulatory agency ANS Finland to perform six 40-minute inspection flights coordinated via a UTM system designed by Belgian software firm [Unify](#).

The program allowed the Finnish government to trial both a new drone inspection system for airport infrastructure, but also a comprehensive traffic management system that **will safely integrate drones and manned aircraft within the same airspace domain.**

CanardDrones UAVs inspected the precision approach path indicator (PAPI) system at the Pori Airport. PAPI refers to the visual guidance system that assists pilots in maintaining proper course approach. "It was truly amazing. We were **doing something for the first time in history** and all the operation [sic] was performed as a ballet. Fast, safe and coordinated," said Rafael Aguado, CanardDrones COO.

Using the Unify software solution, air traffic control enjoyed full situational awareness of all drone flights in the demonstration and handled them safely side-by-side with manned aviation.

"We worked alongside for 13 hours and were still able to create very fast interventions in a completely new way," said Ronni Winkler Østergaard, Unify Regional Manager, Scandinavia and Baltics. <https://dronelife.com/2018/06/10/finnish-government-tests-successful-drone-utm/>

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FAA's Safety Rules for Commercial Drones Are Overly Strict, Report Says Andy Pasztor June 11, 2018



The commercial drone industry is being stifled by unnecessarily stringent federal safety rules enforced by regulators who frequently pay only lip service to easing restrictions or streamlining decision-making, according to a report by the **National Academies of Sciences, Engineering and Medicine.**



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The unusually strongly worded report released Monday urges “top-to-bottom” changes in how the Federal Aviation Administration assesses and manages risks from drones.

The report, which was requested by Congress, also criticizes the agency for extending its traditional focus on “near-zero tolerance for risk” involving airliners and applying it to cover small drones flying at low altitudes away from airports. Instead, the report concludes, the agency should peg drone safety to more-comparable hazards confronting people on the ground such as those posed by small private-plane crashes or pedestrian-vehicle accidents.

Such minimal but persistent levels of risk already are accepted by the public, according to the report. A fundamental issue is “what are we going to compare [drone] safety to?” said consultant George Ligler, who served as chairman of the committee that drafted the document.

The FAA, which received a copy of the report and a verbal briefing late last month, on Sunday said it “is working to safely accelerate [drone] integration on multiple fronts,” including establishing pilot programs and drafting proposed rules. The report “confirmed that the FAA executive team has a consistent approach to risk management,” according to the agency’s statement. The FAA also called the report “an endorsement of our efforts and encouragement to accelerate” changes in its procedures.

Written by a 14-member panel of academics, researchers and aviation experts—with industry representatives in the minority—the report amounts to one of the most pointed criticisms yet of institutional and cultural roadblocks facing the burgeoning drone industry inside the FAA. https://www.wsj.com/articles/faas-safety-rules-for-commercial-drones-are-overly-strict-report-says-1528729200?mod=ITP_businessandfinance_2&tesla=y

Airbus to Develop Maritime Delivery UAS 10 Jun 2018 Mike Rees



[Airbus](#) has announced it has entered into a strategic collaboration with [Wilhelmsen Ships Service](#) to drive the development of an end-to-end service for safe deliveries of parcels with an unmanned aircraft system (UAS), in the maritime industry.

Skyways is an experimental project aimed at developing a safe and commercially viable aerial unmanned delivery system for use in dense urban cities in its first trial phase. The project is being led by a team in Singapore, where plans are progressing towards the launch of a first trial system at the National University of Singapore.



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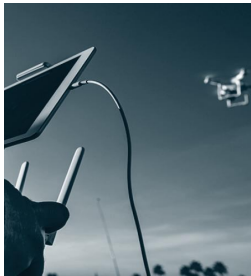
Under this collaboration, Airbus is the overall Skyways system architect and provider, contributing its expertise in aeronautical vertical lift solutions and experiences from its first trial phase, to develop the UAS for shore-to-ship deliveries. The UAS is an innovative system-of-systems that includes aviation-standard UAVs, ground control stations, air navigation systems, and operational and maintenance procedures. Wilhelmsen, with its wealth of experience in ship agency services, will develop and provide customer services, and ensure compliance of the UAS operations with maritime safety and security regulations.

The initial two-week shore-to-ship pilot trial will begin in the third quarter of 2018, **delivering parcels to vessels anchored off the coast of Singapore** – one of the world's busiest ports. Command and delivery centres will be set up at the pier to facilitate the deliveries, with an initial delivery range of up to 3km from the shoreline.

http://www.unmannedsystemstechnology.com/2018/06/airbus-to-develop-maritime-delivery-uas/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=fa6fe25f6a-eBrief_2018_June_12&utm_medium=email&utm_term=0_6fc3c01e8d-fa6fe25f6a-119747501

13Jun18

UAS KEEPING CITIZENS SAFE IN HAMPTON, VIRGINIA AUVSI NEWS JUN 11, 2018



The city has a Joint Police/Fire Unmanned Aerial Vehicle Unit, consisting of six firefighters and six police officers. The joint unit can use its UAS for a variety of tasks including fighting fires, post-disaster assessments and locating high-risk suspects on the run.

“Let’s say I have a suspect heavily armed lying out here. We have canines that can go out there and locate; officers can put out a screen and try to find him,” explains Sgt. Mark Kincaid, the Commander of the Joint Police/Fire Unmanned Aerial Vehicle Unit, [via WTKR.com](http://www.wtkr.com).

“But if the suspect is in a contained location, we can put an aircraft over the area, locate the suspect, get an exact location and be able to see if he is armed. What is he wearing? What is his condition? Is he hurt? This is important information to develop tactics to move forward.”

Thanks to having a special FLIR camera that shows thermal imaging, the fire department has an upper hand when battling fires. The incident commander can look for hotspots in a building and guide firefighters to enter from a less dangerous part of the structure.



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“Being able to use this technology to provide not only security and safety for our citizens but for our firefighters and police officers to give them that edge,” Sgt. Kincaid concludes.

<http://www.auvsi.org/industry-news/uas-keeping-citizens-safe-hampton-virginia>

Manna from heaven. How e-commerce with drone delivery is taking flight in China Jun 9th 2018 | ZHANGWEI, JIANGSU PROVINCE



Suqian, near Zhangwei, was chosen as JD’s first drone delivery hub because of the region’s flat terrain, which makes drone flight easier. The firm runs two drone-dispatch centres. They cover 15 villages between them. There are more drone bases in Shaanxi province, covering a total of **100 villages**.

Once the drone’s cargo hits the ground, its contents pass over to the “drone postman” for delivery. This is either a local JD promoter, whose primary job is teaching villagers how to use JD’s shopping app, or a worker hired on China’s leading crowd-working platform, Dada. In Zhangwei JD’s local promoter, Zhang Xiaoyan, takes possession and rings the owners of the packages to see if they are at home. Only one is, so he leaves the other two at the local shop and sets off on foot to the Jiang household. The son, who placed the order, is not at home, so his mother accepts it for him. It is a phone case, **ordered the previous day**.

JD may have added drones to daily Chinese village life, but whether they will make financial sense for the company over time remains to be seen. The government approves of its operations in rural areas. If JD can use drone delivery to cut its costs and attract rural shoppers, that will help the firm compete with its arch-rival in e-commerce, Alibaba, which has not, as yet, seen the value of drone delivery. JD hopes that will prove to be a mistake.

<https://www.economist.com/business/2018/06/09/how-e-commerce-with-drone-delivery-is-taking-flight-in-china>

NASA Launches ‘Ikhana’ Unmanned Aircraft for Initial Test Flight in National Airspace Jane Edwardson: June 13, 2018In: News, Technology



NASA on Tuesday conducted a test flight of a [General Atomics](#)-built remotely piloted aircraft to assess the capability of the platform to **operate in the national airspace without the use of a safety chase plane**.

The *Ikhana* aircraft took off from NASA’s Armstrong Flight Research Center in California and entered into the public airspace where it flew at an altitude



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of approximately 20,000 feet. The unmanned aircraft made its descent on the city of Tehachapi, Calif., at about 10,000 feet before heading to the Victorville, Calif.-based airport to exit the public airspace used by commercial planes.



Ikhana has several detect-and-avoid systems that work to prevent collisions with other aircraft during the test flight, including an airborne radar from General Atomics' aeronautical systems business, an *Automatic Dependent Surveillance-Broadcast* tool, a detect-and-avoid fusion tracker and [Honeywell's Traffic Alert and Collision Avoidance System](#).

NASA's [Ikhana MQ-9 Predator B](#) is a 36-foot-long drone that has a wingspan of 66 feet and is designed to carry 400 pounds of internal sensors and more than 2,000 pounds of external pods at an altitude of up to 40,000 feet. <http://blog.executivebiz.com/2018/06/nasa-launches-ikhana-unmanned-aircraft-for-initial-test-flight-in-national-airspace/>

14Jun18

Senate Homeland Security Weighs in on DHS Data Sharing, Drones Jun 13, 2018

NEWS EMERGING TECH



The Senate Homeland Security and Governmental Affairs Committee advanced 14 bills out of its business meeting today, including legislation to protect against drone threats and to establish a framework for the Department of Homeland Security (DHS) that will improve data sharing across DHS's numerous component agencies.

The Preventing Emerging Threats Act of 2018, which is sponsored by Sen. Johnson, is intended to assist DHS in **preventing emerging threats from unmanned aircraft and vehicles**. The legislation would authorize the DHS Secretary and Attorney General to take action to protect certain covered facilities and assets from dangers posed by unmanned aircraft, and to mitigate those threats.

"The threats posed by malicious unmanned aircraft are too great to ignore," said Johnson in a release. "It is not enough to just tell drone operators not to fly in certain high-risk areas; we must give federal law enforcement the authority to act if necessary." The legislation received bipartisan support. <https://www.meritalk.com/articles/senate-homeland-security-weighs-in-on-dhs-data-sharing-drones/>



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Utilities Deploy Drones to Keep Birds from Nesting on Poles Betsy Lillian June 13, 2018



FirstEnergy says its electric utilities are deploying drones to inspect the nests of protected birds of prey. Drones offer a fast and safe way to survey locations in which birds have started nesting on utility poles and other electric equipment – **without disrupting the birds** by having a line worker inspect the nest.

The company explains that birds of prey, such as ospreys and eagles, often seek out tall structures – including electric transmission towers and poles – to build their nests, which can measure up to three feet in width. These nesting habits often place the birds near energized electrical equipment – jeopardizing their well-being and potentially causing power outages. A typical bird nest inspection requires a line crew to go out to each nesting site to inspect the nest, but this method can be not only unsettling to the birds but also time-consuming for the crews.

“We were initially concerned the drone would startle the birds, but they were more frightened by the people on the ground and didn’t seem to notice the drone in the sky,” explains FirstEnergy’s Amy Ruszala, an environmental scientist who was recently on-site for the first nest inspections. “I am excited we are **among the first** in the utility industry to use drones for nest inspections and confident other utility companies will use our positive feedback and follow suit.”

By using a drone, each nest inspection was completed **within 15 minutes**. If the drone observed a nest without eggs on a utility pole, a line worker in an aerial bucket truck confirmed it was empty and removed the nest. “If a nest with eggs is situated on our equipment and poses a serious threat to the birds’ safety and our service reliability, we will work with state wildlife officials to **install a special nesting box** to provide a safer home for the ospreys and eagles.”

FirstEnergy plans to team up with wildlife officials this fall and use the drone footage to identify and **build new nesting platforms** far away from electrical equipment. https://unmanned-aerial.com/utilities-deploy-drones-to-keep-birds-from-nesting-on-poles?utm_medium=email&utm_source=LNH+06-14-2018&utm_campaign=UAO+Latest+News+Headlines



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Using Drones to Monitor Volcano Activity and Save Lives June 14, 2018 Juan Plaza



We've seen an incredible amount of new applications for small unmanned aerial vehicles (sUAV) over the past 24 months, and those range from drones that can [plant trees by firing seeds into the ground](#) to UAVs that can [pick up and carry objects](#), but some of the most important innovations for the technology are happening in **the first responders and search and rescue (SAR) sector**.

Swimmers in Australia have been rescued by a [drone dropping a life-saving device from above](#). More and more fire and police departments [from all over the world](#) are adopting, integrating and deploying UAV platforms into their day-to-day workflows. Using drones to support remote sensing data acquisition requirements might not seem like an application that is especially relevant in the context of first response, but the U.S. Department of the Interior (DOI) recently showcased just how essential the technology can and will be when it comes to monitoring emergency situations, spotting victims and dispatching manned vehicles to perform rescues in a quicker and more efficient manner.



Last month, the [DOI deployed UAVs](#) to support the remote sensing data acquisition requirements for the monitoring of the Kilauea Volcano eruptions in Hawaii. This effort was coordinated with various teams of sUAV operators from the USA Geological Survey ([USGS](#)) and their own [DOI Office of Aviation Services](#).

The teams monitored volcanic activity using thermal video imagery and on-board gas sensors. Additionally, the teams assisted the local county and fire emergency managers in support of monitoring lava movement toward the Puna Geothermal Venture Hawaiian Electric Plant. In response to changing mission demands, DOI sUAV **payloads were adapted and reconfigured** to provide periodic assistance to local emergency managers, including investigation of lava-surrounded communities for potentially-stranded people and delivery of live video feeds of lava flow conditions/paths to the Emergency Operations Center (EOC) in support of emergency evacuation efforts.

A few days after that deployment, the DOI sUAV response team was conducting mapping missions to monitor lava advancement rates and direction toward the highway and populated areas. The team then launched a drone to assess the area in the northeast corner of Leilani



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Estates and identified a new outbreak of lava that was very rapidly moving into a residential area.

The team notified the EOC and field operations of the flow and the urgent need to evacuate the area. The team also began providing live video coverage of the flow's progress to emergency officials in the EOC, who dispatched police and fire units to clear residents off the street. The sUAV team continued to provide live coverage of the breakout, and EOC personnel were able to use the information to guide evacuation actions, including dispatching an emergency alert notification to anyone in the area.

During the preflight, the sUAV team overheard radio transmissions that a civilian was trapped at their residence. The team confirmed the location of the residence and flew into the area to assess if they could be of assistance. The individual was spotted and instructed to ["follow the drone to safety"](#). The individual began moving through the jungle toward the street where the drone was hovering. While the individual was making their way through the jungle, the sUAV team was able to track him visually (he was using a cell phone flashlight) and information about his location was relayed to the ground searchers. After about 10 minutes of providing direction information to both the stranded person and the first responders, the search team was able to make contact and guide him to safety. The sUAV team stayed onsite until the crews were clear of the area. The UAS team, field operations, and EOC worked the situation for 2.5 hours.

In addition to the SAR mission, the sUAV team was able track the rate of advancement of the lava flow along the affected street. They also provided real-time information to field operations and a live video feed to the EOC regarding the rate and direction of the flow as well as any structures destroyed.

We've detailed what it has meant for the DOI to [measure the success of their drone adoption](#), but this application demonstrates the real world ramifications of what doing so can mean. Seeing them use drone technology **for so many purposes in one setting** reveals what's possible when the technology is being utilized in a deliberate manner, as the coordination between field ops, the ground searchers, dispatch, the EOC and the DOI sUAV team was very effective. It proves, once again, that drone technology can be leveraged in active emergency situations to save lives and provide valuable insight into a developing incident scene. This surely won't be the last time we hear about instructions to **"follow the drone to safety"**.

https://www.expouav.com/news/latest/using-drones-to-monitor-volcano-activity-and-save-lives/?utm_source=informz&utm_medium=email&utm_campaign=newsletter&utm_content=newslette



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15Jun18

Reykjavik Residents Will Soon See Expanded Drone Deliveries BY MARCO

MARGARITOFF JUNE 14, 2018



The Israeli drone company [Flytrex](#) launched [the world's first autonomous drone delivery system in Iceland last year](#) through a partnership with online retailer Aha, bringing on-demand aerial deliveries to a large portion of the capital Reykjavik's citizens. While this was an impressive and tangible feat, it was, still, merely a limited trial phase. [According to the BBC](#), Aha is preparing to expand delivery drone operations substantially over the next two years.

Aha (think of it as Iceland's [Amazon.com](#)) is [officially permitted to aeri ally delivery along 13 routes](#) around the capital. Additionally, the company has been granted permission to cover up to 2,300 foot (700 meters) detours to reach its customers. Ultimately, this allows the retailer to effectively serve half the city with drone deliveries of goods with Iceland, Flytrex, and Aha impressively differentiating themselves from their European counterparts in the field. <http://www.thedrive.com/tech/21511/reykjavik-residents-will-soon-see-expanded-drone-deliveries>

NNSA Deploys Counter-UAS System at Los Alamos Facility Joanna Crews June 15, 2018 Civilian, Latest News



The [National Nuclear Security Administration](#) has collaborated with the [Federal Aviation Administration](#) to field a technology platform designed to counter unauthorized unmanned aircraft systems near the Los Alamos National Laboratory in New Mexico.

LANL [said Thursday](#) it implemented a government-authorized system using legal authority under the *2017 National Defense Authorization Act* to protect the facility against drone threats that may harm laboratory personnel and infrastructure.

"We can detect and track a UAS, and if it poses a threat, we have the ability to disrupt control of the system, seize or exercise control, confiscate, or use reasonable force to disable, damage or destroy the UAS," said Michael Lansing, head of security operations at LANL.

NNSA intends for the laboratory's counter-UAS program to serve as [blueprint](#) for the adoption of similar programs at the Pantex Plant in Texas, National Nuclear Security Site in Nevada and Y-12 facility in Tennessee.



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The agency also created signage that warns drone operators regarding airspace boundaries and noted it will coordinate with other government agencies to craft protocols for the operator's recovery of confiscated UAS. <http://www.executivegov.com/2018/06/nnsa-deploys-counter-uas-system-at-los-alamos-facility/>