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## **Drones Gain Popularity On US Farms.**

The [Omaha \(NE\) World-Herald](#) (4/7) reported that farmers across the US “are taking to the sky” with unmanned aerial vehicles (UAV) “in hopes of improving production and quality on the ground.” The popularity of UAVs on farms “is projected to grow rapidly,” with agriculture eventually expected to “account for an 80 percent share of the global commercial drone market, according to a 2013 report by the Association for Unmanned Vehicle Systems International.”



Nitrogen fertilizer loss is seen on the right side of the sprayer as evidenced by the stunted plants

## **FAA Announces UAS Ban Over 133 US Military Bases.**

On Friday, the FAA announced a ban on all unauthorized UAS operations over 133 US military bases, reflecting growing concern among top military, government, and industry officials that military facilities could become a prime target for malicious actors. The ban, agreed upon between the FAA and the Defense Department, takes effect on Friday, April 14.

[Reuters](#) (4/7) reported that aside from military bases, Federal officials also worry that airports or large venues such as stadiums could become the targets of hostile drone operations. According to Reuters, the FAA also is weighing whether to restrict UAS operation over other Federal buildings related to security or intelligence, having already banned all UAS operation in the Special Flight Rules Area centered around Ronald Reagan Washington National Airport.

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## **US Air Force Contracts Private Company To Research UAV Noise Characteristics.**

[Military Embedded Systems](#) (4/10) reports that as part of its effort to develop sound regulations for unmanned aerial vehicles (UAVs), the US Air Force Research Laboratory's 711th Human Performance Wing/Airman Systems Directorate/Battlespace Acoustics Branch has reached a cooperative agreement with composite-systems company Owens Corning for the development of “best practices for measuring and labeling the sound produced” by small UAVs. The results “will be used to develop a national standard.” The company will record measurements in its acoustic library, while the Air Force will provide open-air testing at the White Sands Missile Range site in New Mexico.

## **San Diego Votes To Amend Local UAV Law.**

[KFMB-TV](#) San Diego (4/10) reports that the “San Diego City Council voted unanimously Monday to amend the municipal code to encourage safe operation of unmanned aircraft...to bring local laws in line” with FAA rules. The [San Diego Union-Tribune](#) (4/10) reports that city officials refused to describe the new rules as a “crackdown,” stressing they don't make anything illegal that wasn't already illegal under” FAA regulations. However, according to the Tribune, the rules will give local

law enforcement authority to issue citations and levy fines against those violating federal regulations, due to the city council's decision making those regulations part of the municipal code.

## Canada's SkyX Develops Fully Autonomous UAS for Inspections in Oil and Gas Industry

By [AUVSI News](#)

A Canadian startup named SkyX has announced that it has developed a new suite of fully autonomous UAS that are designed specifically to conduct inspections within the oil and gas industry. The UAS, which is named SkyOne, has vertical takeoff and landing (VTOL) capability, and can inspect pipelines for damages and detect things such as leaks, vegetation encroachment, and vandalism.

With an ability to also conduct mapping and security surveillance missions, the SkyOne can recharge itself in the field by flying to the nearest available xStation before completing the rest of its mission. The UAS can also cruise at 150km/h for 70min.

"Our unique solution, which combines both VTOL flight and autonomous remote charging, puts us well ahead of the competition," says Didi Horn, the founder of SkyX, [via Aerospace-Technology](#). Horn is a former Israeli Air Force captain and UAS pilot. <http://www.auvsi.org/blogs/auvsi-news/2017/04/10/canadas-skyx-develops-fully-autonomous-uas-for-inspections-in-oil-and-gas-industry>



## FAA to release maps to speed up UAS authorizations near airports

Starting April 27, the FAA will provide access to facility maps that show areas and altitudes near airports where UAS may safely operate. The FAA says the maps will help operators improve the quality of their Part 107 airspace authorization requests, which will enable the agency to process the requests faster. The maps will be informational only and will not automatically authorize flights. But they will help remote pilots tailor their requests for authorizations by aligning them to locations and altitudes that are likely to be approved for small UAS operations.

The FAA will release the maps in phases over the next 12 months, with 200 facility maps in the first phase. Users will be able to download the data in several formats, view the site on mobile devices and customize their views. The maps will be available on the FAA's UAS website.

[AUVSI eBrief April 11, 2017](#) <https://www.faa.gov/news/updates/?newsId=87867>

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## FAA Ban On UAV Use Over Military Installations Taking Effect Friday.

The [Washington Times](#) (4/11) reports that the FAA's newly-announced ban on UAV operation near 133 military installations is slated to take effect Friday, marking the first time airspace restrictions by the agency will apply solely to unmanned aircraft. In its statement, the FAA said that it had agreed

with the Department of Defense “to restrict drone flights up to 400 feet within the lateral boundaries” of the facilities. According to the agency, anyone found in violation “may be subject to enforcement action, including potential civil penalties and criminal charges.”

## **US Air Force To Base New Remotely Piloted Aircraft Operations In Nevada.**

The [Las Vegas Review-Journal](#) (4/11) reports that the US Air Force will establish remotely piloted aircraft services at Nevada airfields under a recently-announced \$3.6 billion contract awarded to URS Federal Services. URS was contracted to “provide testing, tactics development, advanced training, (and) Joint and Air Force urgent operational need missions” until 2034 at locations including the Nevada Test and Training Range, Creech Air Force Base and the Tonopah Test Range Airfield. Nevada UAS Test Site Director Chris Walach welcomed the news, saying, “Any time you’re bringing in contracts to the state of Nevada, the aviation industry benefits.”



A Predator drone takes off from Creech Air Force Base at Indian Springs on Tuesday, April 11, 2017. (Bizuyehu Tesfaye/Las Vegas Review-Journal) @bizutesfaye

## **VTOL Drone Autonomously Transports Lab Samples Between Hospitals** 09 Apr 2017



[Swiss Post](#) has announced that, in conjunction with the Ticino EOC hospital group and drone manufacturer [Matternet](#), it has been successfully conducting initial drone flights in Lugano for the purpose of autonomously transporting laboratory samples between two EOC hospitals. The Federal Office for Civil Aviation (FOCA) has given the project the green light.

The initial flights transported laboratory samples autonomously between two EOC hospitals in Lugano – the Ospedale Italiano and the Ospedale Civico. The samples are currently transported by road. The use of drones will make transport faster and more efficient in order to further enhance the provision of care to patients.

In total there have so far been around 70 autonomous test flights between the two hospital locations. The Federal Office for Civil Aviation (FOCA) has been involved in the project from the outset, inspecting the drone and its safety components, defining the legal conditions for flying it,

and granting Swiss Post and Matternet approval for the flights. The partners will carry out further test flights, after which an initial evaluation will take place. Further testing with flights is planned over a one-month period in summer 2017.

<http://www.unmannedsystemstechnology.com/2017/04/swiss-post-drone-transport-hospital-laboratory-samples/>

## **Maritime drone development pitched to Sen. Mark Warner**

At the National Institute of Aerospace in Hampton, Sen. Mark Warner and others held a roundtable about unmanned systems, Air seagoing and undersea drones with local experts advising on what's needed. [Tara BozickContact Reporter](mailto:tbozick@dailypress.com) tbozick@dailypress.com

Hampton Roads leaders told Sen. Mark Warner on Tuesday that Hampton Roads -- and Virginia -- could attract and develop more drone businesses if the region leveraged not just its aerospace expertise but also its waters. The Peninsula Technology Incubator and the National Institute of Aerospace in Hampton hosted about 25 stakeholders for a roundtable discussion on how to grow the drone industry in the region. Warner asked for specific to-dos.

Across the country, drone aircraft and self-driving cars grab a lot of attention, but incubator director Daniel Morris said underwater drones and other autonomous marine vehicles have the potential to grow local jobs, too. "We believe it's probably the greatest segment to have the greatest potential for growth because of the resources around us," Morris said.

So Morris said he and other local leaders are launching the nonprofit Hampton Roads Unmanned Systems Alliance to bring industry stakeholders together to not only highlight and market the region's drone potential but also to find actionable ways to grow the industry.

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## **Sacramento County Bans UAVs From Regional Parks.**

The [Sacramento \(CA\) Bee](#) (4/12) reports that Sacramento County's Board of Supervisors voted Tuesday to ban UAVs from the county's regional parks. The ordinance adds UAVs to the county's existing list of "flying model airplanes" prohibited from the parks. Chief Park Ranger Michael Doane said that the measure resolves ambiguity over whether UAVs are subject to the model airplane restrictions.

## **Bezos Sees Expanded Uses For New Shepard.**

[SPACE](#) (4/12) reports that Blue Origin founder Jeff Bezos said last week that he believes that the company's New Shepard rocket could be modified for missions beyond the scope of its initial application as a space tourism vehicle. Speaking at the 33rd annual Space Symposium, Bezos suggested that a second-stage booster could be added to the rocket for launches of **small satellites**. "It'd be perfectly capable of being a first stage for a small orbital vehicle," he said. Bezos added that lessons from development of New Shepard are helping Blue Origin design its larger New Glenn orbital rocket, and will help in developing the future, newly-announced Blue Moon lunar cargo vehicle.



## **APPLE STORES WILL SOON HAVE DRONES FLYING AROUND INSIDE THEM** *By [Trevor Mogg](#) — April 13, 2017 12:25 AM*

Apple is so impressed with ZeroZero Robotics' little Passport drone that it is featuring it in its Apple stores. If you visit an Apple Store from this week and hear a buzzing noise in the vicinity, don't worry — it's not a giant mosquito flying toward your head at speed. Instead, it'll most likely be the Hover Camera Passport ... in which case you might still want to watch your head.

The diminutive selfie drone, which launched toward the end of last year, will go on sale shortly at Apple Stores around the world, though from this week staff will be happy to offer interested visitors an in-store demonstration.

Apple inked an exclusivity deal with Beijing-based ZeroZero Robotics to become the sole seller of the Passport. The tech giant is offering a bundle (one drone, two batteries, a charger, an adapter, and an easy-carry bag) for \$500 — that's \$100 cheaper than what it's selling for on the Chinese firm's own web store.

"We're thrilled to bring autonomous flying photography into the hands of consumers who are excited by truly innovative technology that impacts their everyday lives," ZeroZero Robotics' CEO Meng Qiu Wang [said](#) in a release. "By selling in Apple, we want more customers to capture their memories in a near-effortless way through breathtaking perspectives that can only be achieved through Hover Camera Passport." <http://www.digitaltrends.com/cool-tech/apple-store-selfie-drone/>

## **Virginia Beach-based HAZON Solutions helps clients get drones off the ground** *By [Sandra J. Pennecke](#) [sandra.pennecke@insidebiz.com](mailto:sandra.pennecke@insidebiz.com) Apr 11, 2017*



HAZON, which means vision in Hebrew, has its office in Virginia Beach near Oceana Naval Air Station. Its test flying and equipment is stored in Suffolk. The small business, a developer of

small unmanned systems operations, capability development, training, safety and testing programs, was started in 2014 by David Culler Jr. and Sean Cushing.

Both men retired from the military – Culler was a Navy captain who served as the commanding officer of Strike Fighter Squadron 136, based at Naval Air Station Lemoore, Calif., and Norfolk Naval Station; and Cushing was a Navy commander who flew F/A-18s leading combat missions in Iraq and Bosnia.

While the men’s missions are of a different kind now – to conduct, support, develop and validate small unmanned systems – they are dedicated to providing safe, effective and efficient operations. “Our main focus is on precision inspection of large infrastructure unmanned aircraft,” Hine said noting they have teams in West Virginia and as far north as New York and as far south as Georgia. “We use small drones to inspect power lines, bridges for rail companies, solar fields, renewable energy inspections, building facilities and cell phone towers.”

Hine said one of the company’s noteworthy milestones at the end of March included having inspected 4,500 individual power structures and 55,000 feet of bridges.

[http://pilotonline.com/inside-business/news/small-business/virginia-beach-based-hazon-solutions-helps-clients-get-drones-off/article\\_1c4e6be6-619c-55fb-bb3e-a3d4488833fc.html?spMailingID=10811845&spUserID=NjMONzcxNjYwNTkS1&spJobID=1140962838&spReportId=MTE0MDk2MjgzOAS2#utm\\_source=pilotonline.com&utm\\_campaign=%2Fnewsletters%2Finside-business%2Fthursday%2F&utm\\_medium=email&utm\\_content=headline](http://pilotonline.com/inside-business/news/small-business/virginia-beach-based-hazon-solutions-helps-clients-get-drones-off/article_1c4e6be6-619c-55fb-bb3e-a3d4488833fc.html?spMailingID=10811845&spUserID=NjMONzcxNjYwNTkS1&spJobID=1140962838&spReportId=MTE0MDk2MjgzOAS2#utm_source=pilotonline.com&utm_campaign=%2Fnewsletters%2Finside-business%2Fthursday%2F&utm_medium=email&utm_content=headline)

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## **UK Defence Ministry Seeking Unmanned Vehicles To Resupply Frontline Troops.**

[Aviation Week](#) (4/13) reports that the UK Ministry of Defence is providing an initial £1.5 million (\$1.88 million) for a competition challenging industry and academia to develop unmanned aerial and ground vehicle concepts for supplying frontline troops in the critical “last mile” of support.

For the Autonomous Last Mile Resupply System (ALMRS), the ministry’s Defence Science and Technology Laboratory (DSTL) said that it seeks “novel unmanned air and ground load carrying vehicles” that can operate “autonomously and in complex environments.” DSTL plans to spend £40,000-£80,000 (\$50,000-\$100,000) for each entrant selected to move to the next design stage, and an additional £1.5 million (\$1.9 million) for development of chosen projects.

[http://pilotonline.com/inside-business/news/small-business/virginia-beach-based-hazon-solutions-helps-clients-get-drones-off/article\\_1c4e6be6-619c-55fb-bb3e-a3d4488833fc.html?spMailingID=10811845&spUserID=NjMONzcxNjYwNTkS1&spJobID=1140962838&spReportId=MTE0MDk2MjgzOAS2#utm\\_source=pilotonline.com&utm\\_campaign=%2Fnewsletters%2Finside-business%2Fthursday%2F&utm\\_medium=email&utm\\_content=headline](http://pilotonline.com/inside-business/news/small-business/virginia-beach-based-hazon-solutions-helps-clients-get-drones-off/article_1c4e6be6-619c-55fb-bb3e-a3d4488833fc.html?spMailingID=10811845&spUserID=NjMONzcxNjYwNTkS1&spJobID=1140962838&spReportId=MTE0MDk2MjgzOAS2#utm_source=pilotonline.com&utm_campaign=%2Fnewsletters%2Finside-business%2Fthursday%2F&utm_medium=email&utm_content=headline)

