UAS and SmallSat Weekly News

Contents

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In South Africa, Drone Fishing is Really a Thing MARCO MARGARITOFF OCTOBER 5, 2017

Fishing and flying drones may seem completely unrelated, but a drone fishing tournament in South Africa argues otherwise.

On Saturday, one of the **first drone fishing competitions in the world** took place on a South African beach, where 65 of 70 anglers used UAVs to carry their bait offshore to gain an advantage in the competition.

According to the *South Coast Herald*, a regional South African publication, 100,000 South African Rand (a value of $7,326) were on the line. Yugen Govender, who organized the tournament, claimed that this was the first time in the world that drones were used for fishing, and that using a UAV almost guarantees the angler he'll catch a fish. Of course, since this was a catch and release session, all fish were returned to sea upon being caught. http://www.thedrive.com/aerial/14891/in-south-africa-drone-fishing-is-really-a-thing

How Drone-Mounted Lasers May Save the World from Weeds Jason Reaganon: October 05, 2017

Researchers with New Zealand-based AgResearch, in partnership with the Universities of Auckland and Michigan and NZ-based technology firm Redfern Solutions Limited, recently harvested a $1 million NZD grant ($711,00 USD) from the New Zealand government. The goal is to create a "map and zap" program which will deploy drones equipped with lasers and sensors to eradicate the thousands of acres of weeds that threaten the country's crops. According to an AgResearch study, weeds cost New Zealand's agricultural sector around $1.69 billion ($1.2 billion USD) in crop damage every year.

"The idea is to mount cameras on the drone that can identify the weeds based on their unique chemical signatures and how they reflect light, and precisely map their locations using GPS," program lead Kioumars Ghamkhar said in a company press release. *"From there, we think **smart spraying** (rather than systemic and non-targeted use of chemicals), or the right kind of laser mounted on the drone could home in and damage the weed.* The effectiveness of lasers against plants has been tested overseas before but that was in the lab, and we'll be taking it out in the

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field to test and see if it works as we have planned." https://dronelife.com/2017/10/05/drone-mounted-lasers-may-save-world-weeds/

Ameren Illinois begins drone inspections Staff Report Oct 5, 2017

Ameren Illinois is adding unmanned aircraft, commonly known as drones, to the arsenal of tools used to bring gas and electric services to Lincoln and Logan County. As of this week, Ameren Illinois **has trained 36 employees in drone operations**, all of whom are now licensed and certified by the FAA.

The company, which delivers electricity to 1.2 million electric and 816,000 natural gas customers across 1,200 communities in Illinois, said in a news release this week, "Whether crews are dealing with downed power lines in a heavily wooded area or standing water near electrical infrastructure, emergency and storm response situations often expose workers to dangerous unseen hazards."

Workers usually have to enter the energized zone, in close proximity to live wires, in order to evaluate equipment damage. By flying a drone over power lines or other pieces of infrastructure, crews can quickly identify problems and have the necessary information to make quicker repairs. http://www.lincolncourier.com/news/20171005/ameren-illinois-begins-drone-inspections

DARPA Invests in Anti-Drone System for Small Craft MarEx 2017-10-05

The U.S. Defense Advanced Research Projects Agency is investing in technology to help Coast Guard boats and military vehicles defend against the threat of small drones. Small unmanned aircraft grow less expensive and more readily available every year, and when weaponized, they pose an array of dangers for American ground and maritime forces, DARPA says. Islamic State has deployed this class of weapons against American and Iraqi forces, and Iran has used small fixed-wing drones to harass the U.S. Navy.

To counter the threat of remote-controlled and self-guided drones, DARPA has launched a new **"Mobile Force Protection" program** to develop the technology to detect, identify, track and neutralize enemy drones while minimizing collateral damage. The program seeks to develop low-cost solutions that could be fielded within three to four years. http://maritime-executive.com/article/darpa-invests-in-anti-drone-system-for-small-craft

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How drones could be 'lifesaving' in an emergency

Jacqueline Howard, CNN October 9, 2017

(CNN) Researchers at William Carey University in Mississippi are studying how disaster drones could carry medical kits to victims in a mass casualty event, before an ambulance arrives. Bystanders could use the kits to help victims, or first responders on the scene could use them when multiple victims are injured. The **disaster drones**, which also could deliver medicine to hard-to-reach remote locations, were designed and built at Hinds Community College in Mississippi.

The researchers have various prototypes, said Italo Subbarao, senior associate dean at William Carey University College of Osteopathic Medicine, who is involved in the university's telemedicine drone research project.

"We have a kit that is a general medical emergency kit that we would probably fly to a farmer's home ... for a rural type of general medical emergency," Subbarao said, such as a heart attack.

"We've got kits that are designed to go into the wilderness so that if you're stung by a bee or you've got a snake bite, things of that nature, we can provide assistance in that moment," he said. "Most recently, we demonstrated our trauma kits."

These kits could be used in a mass casualty event like a terror attack or a train crash, or when someone needs critical care. "We look at this as a piece of the puzzle, an important piece of the puzzle, that can connect with the local emergency management system," he said.
http://www.cnn.com/2017/10/09/health/ambulance-drone-teching-care-of-your-health/index.html

DRONE DELIVERY CANADA TO PROVIDE DELIVERIES VIA UAS TO MOOSE CREE FIRST NATION IN NORTHERN ONTARIO

AUVSI NEWS OCT 5, 2017

Drone Delivery Canada (DDC) and Moose Cree First Nation have entered into an agreement to start a commercial program that will use DDC's UAS delivery system to make deliveries to the community located in northern Ontario, Canada. Mail, food, medical supplies, and general goods are some of the things expected to be delivered via UAS.

"We are very pleased to begin roll out of our drone delivery solution for

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the Moose Cree First Nation community," says Tony Di Benedetto, CEO of Drone Delivery Canada. Patricia Faries, Chief of Moose Cree First Nation, adds, "we are excited to see the formation of this initiative, from pilot testing to potential commercialization and possibly building a business model. This technology is new, and we hope also to help our neighboring communities address the high costs associated with the delivery of goods to their communities." DDC says that this achievement is the **first of its kind for Canada**.
http://www.auvsi.org/industry-news/drone-delivery-canada-provide-deliveries-uas-moose-cree-first-nation-northern-ontario

Colleges Are Marketing Drone Pilot Courses, but the Career Opportunities Are Murky Elizabeth Woyke October 4, 2017

At least 15 community colleges across the country now have courses that teach people how to pilot drones, according to research conducted by *MIT Technology Review*. The trend accelerated over the past year, after the Federal Aviation Administration (FAA) issued a rule that requires people who operate drones commercially to take a test and get certified as "remote pilots."

Some four-year colleges and private companies are also training people to be drone pilots, but the community-college programs are particularly interesting because they attract diverse types of students, including adults looking to change careers. They vary in length from a single weekend to an entire semester and in cost from $130 to $1,250, are open to ages ranging from high schoolers to retirees, and typically lack a formal process for matching enrollees with jobs.

Students practice flying small drones at Mountain Empire Community College in Virginia.

A September course at Quinsigamond Community College in Worcester, Massachusetts, attracted nine students: a hot-air balloon pilot; some other people interested in using drones for photography and videography; two police officers; and one firefighter. The weekend class consisted of one day of indoor preparation for the FAA exam, which is a two-hour, 60-question test, and one day of flight training, which involved maneuvering a 7.5-pound drone made by the Chinese company DJI around the school's parking lot.

Tulsa Community College, Dabney S. Lancaster Community College in **Clifton Forge, Virginia**, and Sauk Valley Community College in Dixon, Illinois, also say their ongoing drone classes are a mix of people who want to acquire skills for their current jobs; take a second, part-time job;

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change jobs; or start new ventures. All of these community colleges began offering drone classes this year. Administrators and instructors who spoke to *MIT Technology Review* characterized their programs as a **response to community demand** rather than an attempt to jump on a fad. https://www.technologyreview.com/s/608968/colleges-are-marketing-drone-pilot-courses-but-the-career-opportunities-are-murky/

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U.S. Navy Awards AeroVironment $2.5 Million Contract for Expansion of Blackwing UAS Program October 9, 2017 Military | News

AeroVironment, Inc. today announced the receipt of a contract award from the United States Navy for continuation and expansion of its Blackwing™ small Unmanned Aerial Vehicles (UAV) program. Blackwing is a small, **tube-launched** unmanned aircraft that employs an advanced, miniature electro-optical and infrared (EO/IR) payload, integrated inertial/ GPS autopilot system and secure Digital Data Link (DDL), packaged into a vehicle that launches from under the surface of the sea, from manned submarines and unmanned underwater vehicles (UUVs). http://uasweekly.com/2017/10/09/u-s-navy-awards-aerovironment-2-5-million-contract-expansion-blackwing-uas-program/?utm_medium=push_notification&utm_source=rss&utm_campaign=rss_pushcrew

Next Gen Drone Integrates Holographic Technology to Connect Doctors, to Survivors October 9, 2017 News

A telemedical drone system with **holographic technology** can quickly put emergency physicians and lifesaving medical supplies in the hands of disaster survivors. The Telemedical Drone Project, known as HiRO (Health Integrated Rescue Operations), was presented Monday at OMED 17 in Philadelphia, the nation's largest conference for osteopathic physicians. This latest version of the HiRO drone is currently being tested to support the Mississippi Department of Emergency Management, Homeland Security, the National Guard and NATO.

The HiRO drone and telemedical kit includes:

- An augmented reality interface that operates on a Microsoft HoloLens headset, which gives a remote physician the ability to treat multiple victims.

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- An automated medication bin that allows the remote physician to unlock specific compartments. This lets bystanders safely access medications and equipment, supported by video guidance from the doctor.
- An integrated holographic electronic health record system display, which helps the remote physician monitor multiple patients in the field. http://uasweekly.com/2017/10/09/next-gen-drone-integrates-holographic-technology-connect-doctors-survivors/

US Military UAV Fleet Infected With Virus.

The Hill (10/8) reported that according to a Wired.com story and "three sources familiar with the matter," the US military UAV fleet has been infected with a computer virus. The military's Host Based Security System announced that it had detected the virus two weeks ago, and "added that it so far has not appeared to affect overseas missions by either interfering with pilots' navigation or leaking classified information." However, a network security specialist told Wired "that the virus keeps returning to computers at Creech Air Force Base in Nevada despite repeated attempts to remove it." One source explained to Wired, "We keep wiping it off, and it keeps coming back. **We think it's benign**. But we just don't know." It's unknown whether the virus is a "keylogger" or "run-of-the-mill malware." Specialists investigating the breach believe the virus "has infected both classified and unclassified systems at Creech Air Force Base."
Test flights into remote indigenous community to start in weeks.

Oh! Canada May Beat U.S. to Commercial Drone Delivery Barb Darrow Oct 9th, 2017

Drone Delivery Canada says it has **received the regulatory approvals** to test commercial drone delivery service in northern Canada within the next four weeks. The drones will be used in Moose Cree First Nation, an indigenous community, about 440 miles north of Toronto, company CEO Tony Di Benedetto tells *Fortune*.

Transporting mail and supplies is time consuming and added time means added cost. A container of detergent can go for $30 to $40 while milk and other perishables cost double what they do in more urban areas, according to*The Toronto Star*. In the winter, the locals use frozen rivers to travel, but global warming has made that risky. Helicopter service is another option, but costs $1,800 an hour.

To address this transport problem, Di Benedetto hopes to build "a railway in the sky" using drones that can be controlled and recharged from stations at each end of the route. Over the last three years, DDC has worked with researchers from the

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Universities of Toronto and Waterloo on technology it says will enable fully autonomous flights that can operate beyond line-of-sight by ground personnel.

DDC is the first Canadian company to get approval from Transport Canada—Canada's FAA equivalent—to fly drones beyond line-of-sight, Di Benedetto says. Initially, DDC plans to test a small unmanned aerial vehicle with a 50-mile range that can carry just under 10 lbs of cargo before increasing the range and capacity. The biggest drone his company is considering using can carry about 3,300 lbs and fly up to 15 hours, Di Benedetto said.
http://fortune.com/2017/10/09/canada-commerical-drone-use/

New Geospatial Solution Turns Drones into Accurate Mapping Systems 10 Oct 2017 | Caroline Rees

Verity has announced the release of Verity Mapper, a complete drone mapping solution that combines professional geospatial products to enable reliable, survey grade mapping.

Verity Positioning is a PPK geo-referencing hardware/software/methodology solution that enables high accuracy mapping from UAVs **without the need to place ground control points**. The system uses a proprietary methodology for camera positioning, calibration and photo tagging in order to create accurate 3D models and maps. Data can be processed in existing desktop photogrammetry workflows, or optionally uploaded to the 4DMapper platform. http://www.unmannedsystemstechnology.com/2017/10/new-geospatial-solution-turns-drones-accurate-mapping-systems/

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North Dakota, one of the nation's most rural states, is leading in an emerging area: Drone experts Trevor Hughes, USA TODAY Oct. 10, 2017

GRAND FORKS, N.D. — North Dakota's windswept prairie and farmers' fields are turning out an unusual crop: Drones.

One of the nation's most rural states, North Dakota has quickly become **one of the leading spaces for drone research, experimentation and testing**.

The sensors are already so good that farmers can count exactly how many cornstalks are growing in a single acre, allowing them to save money on fertilizer and fuel, which keeps food

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costs low. And Grand Forks, N.D., is home to the nation's first commercial unmanned aircraft systems business park, Grand Sky.

Goldman Sachs estimates the worldwide drone industry could be worth $100 billion in the next two years as consumers, governments and businesses adopt and adapt.

The Northern Plains test site is one of only six nationwide, and drone companies range from one-pilot operations up to defense contracting giant Northrop Grumman, which opened a test site at Grand Sky this spring.

The state also benefits from military use of drones deployed around the world but remotely piloted by National Guard pilots and sensor operators in Fargo and Grand Forks. The same pilots and sensor operators who fly Reapers and Global Hawks during their military service are helping develop civilian applications to plan automated flights and make batteries last longer. https://www.usatoday.com/story/news/2017/10/10/north-dakotas-newest-crop-drone-experts/748443001/

FAA Panel Splits on Drone Tracking Requirements *Andy Pasztor* Oct. 10, 2017

Advisory group's dispute over proposed rules threatens to hamper U.S. commercial drone growth

A federal advisory panel has failed to agree on proposals to identify and track unmanned aircraft nationwide, **a potentially serious setback** for expanded commercial drone operations.

In a potentially serious setback for expanded commercial-drone operations, a federal advisory panel has failed to agree on proposals to identify and track unmanned aircraft nationwide.

The committee, which presented its recommendations to aviation regulators earlier this month, couldn't reach consensus on basic questions regarding categories of drones that should require such remote monitoring, according to these officials.

As a result, officials familiar with the details said, it is likely to be more difficult for the Federal Aviation Administration to implement rules acceptable to law-enforcement agencies, hobbyists who fly model airplanes and drone proponents eager to open up U.S. airspace for more uses.

A majority of the committee did conclude that technology currently exists—or can be devised relatively quickly—to deal with one of the most vexing problems impeding acceptance of small

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drones weighing several or dozens of pounds: detecting and tracing low-altitude flights that typically occur outside normal ground-radar coverage. https://www.wsj.com/articles/faa-panel-splits-on-drone-tracking-requirements-1507654447

Flirtey Partners with REMSA to Launch First EMS UAS in the US October 10, 2017

Flirtey and REMSA, a community-integrated emergency medical services provider, today announced a partnership to launch **the first automated external defibrillator (AED) drone** delivery service in the United States.

Cardiac arrest is the leading cause of natural death in America, with more than 350,000 out-of-hospital cases each year, according to the American Heart Association. For every minute that a victim of cardiac arrest waits to receive defibrillation, their odds of survival decrease by about 10 percent. By using drones to deliver AEDs, Flirtey's technology will increase the odds of surviving cardiac arrest and ultimately save lives.

Through the partnership, when REMSA's 9-1-1 communications center receives a cardiac arrest call, in addition to dispatching an ambulance, a Flirtey drone, carrying an AED will soon also be dispatched to the scene of the emergency. By delivering an AED to the scene of a cardiac arrest within minutes of a 9-1-1 call being received, the time that passes between a 9-1-1 call being placed and the application of an AED to the victim will be decreased, increasing their odds of survival. http://uasweekly.com/2017/10/10/flirtey-partners-remsa-launch-first-ems-uas-us/?utm_medium=push_notification&utm_source=rss&utm_campaign=rss_pushcrew

Drones at our beaches providing safety for swimmers Matthew Attard 11 Oct 2017

What's that in the sky? One of the drones patrols from above Flynns Beach during the recent school holidays.

A DEAD whale at Nobbys Beach in Port Macquarie (New South Wales, Australia), at the start of the holiday season heightened fears sharks would be attracted to some of the region's most popular swimming spots. To alleviate concerns, a drone program was launched.

The UAVs were operated by Lifeguards who have been trained locally at the Little Ripper Aviation Academy

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located in the SLSNSW Operations Centre in Port Macquarie.

More recently **a SharkSpotter algorithm** has been developed which enables instant identification of anything in the water, be it a ski paddler, surfer, boat, dolphin, whale or shark. It can differentiate a shark from other objects or marine creatures, hover over it sending live video back to operators on the beach. There has been widespread public support for the initiative with tourists and locals heading to the beach to take a look at the UAV technology in action. http://www.portnews.com.au/story/4980579/eyes-in-the-sky-provide-peace-of-mind/

Firefighting drone to put out fires in Dubai in the future

Sarwat Nasir/Dubai *October 10, 2017 sarwat@khaleejtimes.com*

The first ever autonomous helicopter-drone hybrid firefighter was announced by a robotics firm at the GITEX Technology firm.

A prototype of the technology was on display at the exhibition in Dubai World Trade Centre on Tuesday. There will be **three ways to fly this device,** either with a pilot, autonomously and by controlling it through a control room.

"The drone-helicopter hybrid has six engines and six propellers. Four of the engines will be turned off during in-flight to save power consumption. There are also several safety features installed, in case a pilot is flying it, for example, the parachute system. It will automatically activate if it is needed," the senior project director at Digi Robotics, Kollina Hanskehian, said.

"As you can see in Dubai there are high rise buildings. This drone could be fighting the fire until the defense team reaches. It will be using foam to fight the fire.
https://www.khaleejtimes.com/news/firefighting-drones-to-put-out-fires-in-dubai-in-the-future

12Oct17

Drones Help Kansas State Researchers Stay On Top Of Wheat Improvement

For the past three years, Jesse Poland, an associate professor of plant pathology at Kansas State University and a team of researchers have worked in **five countries** to test and develop new agricultural technologies that are already improving the way crops are grown.

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The most promising of those technologies is the use of unmanned aerial vehicles (UAVs), or drones, to scout agricultural fields for important data. UAVs can do the work in a fraction of the time that it would take humans.

Armed with sophisticated, multi-spectral cameras measuring only a few inches, the drones work up and down rows of lush wheat fields, measuring traits such as the plant's height and vegetation index, or 'green-ness' of the plant, which is determined by the amount of light it reflects. The process is known as high-throughput phenotyping because it collects large amounts of information about the plant's traits, or phenotype.

"The cameras capture the near-infrared light – red, white, green and blue," Singh said. "From that, we create a vegetation index because the light reflected from the plant leaves can be associated with the stress levels. The amount of near-infrared reflectance is an indication of whether the plant is going through some type of stress. It can be sick, or have other diseases. It gives us a rapid measurement of what is going on." http://uasweekly.com/2017/10/12/drones-help-kansas-state-researchers-stay-top-wheat-improvement/?utm_medium=push_notification&utm_source=rss&utm_campaign=rss_pushcrew

'Buy American' expands to include US drone manufacturers Matt Spetalnick and Mike Stone - Reuters

OCTOBER 11, 2017 WASHINGTON—The Trump administration is nearing completion of new "Buy American" rules to make it easier to sell US-made military drones overseas and compete against fast-growing Chinese and Israeli rivals, senior US officials said.

While President Trump's aides work on relaxing domestic regulations on drone sales to select allies, Washington will also seek to renegotiate a 1987 missile-control pact with the aim of **loosening international restrictions on US exports of unmanned aircraf**t, according to government and industry sources.

At home, the US administration is pressing ahead with its revamp of drone export policy under heavy pressure from American manufacturers and in defiance of human rights advocates who warn of the risk of fueling instability in hot spots including the Middle East and South Asia.

The aim is to help US drone makers, pioneers in remote-controlled aircraft that have become a centerpiece of counterterrorism strategy, reassert themselves in the overseas market where

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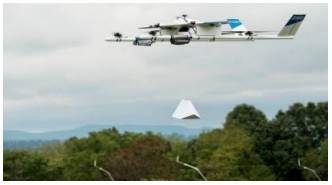
China, Israel, and others often sell under less-cumbersome restrictions. https://www.csmonitor.com/USA/Military/2017/1011/Buy-American-expands-to-include-US-drone-manufacturers

Autonomous systems innovators converge on Blacksburg October 11, 2017



Project Wing's campus burrito drop drew national attention in September 2016.

Unmanned systems, such as driverless cars and drones, become more visible every day. **But does the public trust the technology**? That question and others will challenge leaders in the field of autonomous systems as they gather in Blacksburg for **a conference Oct. 15 to 17**.

Craig Woolsey, professor in the Kevin T. Crofton Department of Aerospace and Ocean Engineering and a conference organizer, said, "Now that these technologies are making their way into commercial products, some practical questions that researchers have had the luxury to ignore have suddenly become quite urgent." The region is a hub for unmanned systems research, with the Virginia Tech Transportation Institute and the Mid-Atlantic Aviation Partnership – an FAA-designated test site for unmanned aircraft systems – situated here.

Many in the academic community have worked with autonomous systems or the component technologies for decades, said John Provo, director of Virginia Tech's Office of Economic Development, part of Outreach and International Affairs. "This is the place to be if you're interested in autonomous systems." https://vtnews.vt.edu/articles/2017/10/outreach-unmannedsystemsmeet.html#.Wd-C5z3Jb-Y.email

Report: Agriculture Drone Market May Exceed $4 billion Jason Reaganon: October 05, 2017

According to an August studyby Esticast Research & Consulting Market Research, the global commercial drone market may reach $3.6 billion by 2024. However, a new study forecasts an even larger bumper crop for just one of the many sub-sectors — agriculture.

The study, released this week by MarketInsightsReports, predicts the ag drone market will exceed the entire drone market value referenced in the Esticast report and do so two years earlier. The report foresees a $4.2 billion value for the agricultural drone market by 2022 —

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representing **a growth rate of 30 percent** and beating Esticast's overall prediction for the whole drone market by $600 million.

Although the marketing report is rather coy with the details – only offering a few tidbits in order to sell a $4,000 full report – it nevertheless touches on some of the key drone players in the growing ag sector such as PrecisionHawk, AeroVironment, Agribotix, AgEagle and DroneDeploy.
https://dronelife.com/2017/10/05/report-agriculture-drone-market-may-exceed-4-billion/

Boeing Lays Foundation for Drone Passenger Travel Frank Schrothon: October 09, 2017

The tidal wave of digital disruption that has swamped media industries is beginning to be felt in transportation. A rapidly developing ecosystem of sensors, AI, and alternative energy systems **is fueling innovation among start-ups and established firms alike**. Last week Boeing announced plans to acquire Aurora Flight Sciences Corporation, a developer and manufacturer of advanced aerospace platforms. Aurora has a strong reputation for innovating autonomous systems technologies to enable advanced robotic aircraft for future aerospace applications and vehicles.

"The combined strength and innovation of our teams will advance the development of autonomy for our commercial and military systems," said Greg Hyslop, chief technology officer and senior vice president of Boeing Engineering, Test & Technology.

In a statement Aurora said it "has designed, produced and flown more than 30 unmanned air vehicles since the company was founded in 1989." They have collaborated with Boeing on the rapid prototyping of innovative aircraft for both military and commercial applications.

"Since its inception, Aurora has been focused on the development of innovative aircraft that leverage autonomy to make aircraft smarter," said John Langford, Aurora founder and chief executive officer. "As an integral part of Boeing, our pioneered technologies of long-endurance aircraft, robotic co-pilots, and autonomous electric VTOLs will be transitioned into world-class products for the global infrastructure." https://dronelife.com/2017/10/09/boeing-agreement-lays-foundation-for-drone-passenger-travel/

DJI Unveils Technology To Identify And Track Airborne Drones October 12, 2017

DJI, today unveiled AeroScope, its **new solution** to identify and monitor airborne drones with existing technology that can address safety, security and privacy concerns. AeroScope uses the existing communications link between a drone and its remote controller to broadcast identification information such as a registration or serial number, as well as basic telemetry, including location, altitude, speed and direction. Police, security agencies, aviation authorities and other authorized parties can use an AeroScope receiver to monitor, analyze and act on that information. AeroScope has been installed at two international airports since April, and is continuing to test and evaluate its performance in other operational environments.

DJI demonstrated the system today in Brussels, Belgium, showing how an AeroScope receiver can immediately sense a drone as it powers on, then plot its location on a map while displaying a registration number. That number functions as the equivalent of a drone license plate, and authorities can use it to determine the registered owner of a drone that raises concerns.
http://uasweekly.com/2017/10/12/dji-unveils-technology-identify-track-airborne-drones/?utm_medium=push_notification&utm_source=rss&utm_campaign=rss_pushcrew

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Public Safety Drones: Do You Need a Part 107 or COA? Miriam McNabbon: October 10, 2017

Police and fire departments are adopting drone technology quickly, as communities realize the life-saving benefits of drones in fire, search and rescue, and other emergency services. But developing a new public safety drone program can be challenging. Aside from making the right choice on drones and sensors, departments need to **navigate airspace regulations** that can seem complex. We asked the experts at Fire Cam, leading providers of drones, cameras, and sensors for public safety organizations to provide some guidance.

DL: What's the first step in setting up a new drone program in a public safety organization?

Fire Cam: One of the first steps requires that the department obtain federal regulatory approval to fly the drone or UAS in the national airspace (NAS). Two different options include

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operating under part 107 remote piloted aircraft (RPA) certification and or under a certificate of authorization (COA). This decision can be confusing but is ultimately determined by a number of factors including type and location of your operations.

While both tools allow an agency to fly a drone, each allows the operator to fly under a different set of rules depending on the requirements of that specific flight. **See the full interview** at https://dronelife.com/2017/10/10/public-safety-drones-need-part-107-coa/

UAS stakeholders to President Trump: Develop pilot program for state and local policy coordination October 12, 2017; AUVSI Press Release

In a letter to President Trump, stakeholders from throughout the unmanned aircraft systems (UAS) community – from manufacturers to business users to government officials – urged the creation of a pilot program for state and local governments to work with the Federal Aviation Administration (FAA) to integrate UAS into the skies above their communities.

The letter, led by the Association for Unmanned Vehicle Systems International (AUVSI), details the importance of federal control of the airspace and outlines a pilot program to get input from states and municipalities to develop policy on UAS operations.

"For months, we have advocated on Capitol Hill for **a pilot program** that allows state and local governments, along with UAS industry stakeholders, **to develop a coordinated effort** with the FAA concerning UAS airspace integration," the 29 companies and organizations wrote. "We are pleased that your administration has also identified this as a sensible approach."

The letter shows wide support for the pilot program from government associations such as the Aerospace States Association, delivery services such as FedEx Express and the United Parcel Service, manufacturers such as DJI and business users including Amazon and Verizon.

"A pilot program would allow for a data-driven process, within a controlled operational environment, to explore the best options for states and municipalities to address their needs, as it relates to different types of UAS operations," the letter continues. "Additionally, a pilot program is the best option for informing future regulatory and congressional action that will help enhance innovation and increase economic impact." https://www.verticalmag.com/press-releases/uas-stakeholders-president-trump-develop-pilot-program-state-local-policy-coordination/

Drone images from fire-ravaged California

Drone images from fire-ravaged California Video provided by AFP Newslook

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https://www.usatoday.com/videos/news/nation/2017/10/12/drone-images-fire-ravaged-california/106550022/

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