



## UAS and SmallSat Weekly News

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26Sep20

**Amazon's Ring will sell a \$250 security drone that flies around your home** Rachel Metz, CNN Business September 25, 2020



**(CNN Business)** Ring, the Amazon-owned home security business, introduced a flying camera on Thursday that may excite home-surveillance fans but is almost certain to rankle privacy advocates.

The \$250 drone, called Ring Always Home Cam, is among a slew of products unveiled during Amazon's [invitation-only online hardware event](#).



The drone is small and light, with a high-definition camera, and it can automatically fly on preset paths to specific spots in your home, streaming video to your smartphone of what it sees along the way. Users can set up paths for the drone via a smartphone app, or if the drone detects motion in a part of your home it can fly on its own to that spot and take video of what's going on. Set for release next year, the drone is meant for indoor use only, and it can be set to work with the Ring Alarm system so that it will fly a preset route if the alarm is triggered. [https://www.cnn.com/2020/09/24/tech/amazon-ring-drone/index.html?utm\\_term=160099208749136876e0f79ef&utm\\_source=Nightcap+-+9.24.2020&utm\\_medium=email&utm\\_campaign=246352\\_1600992087492&bt\\_e=Az8%2FYqRUfGgSPphy480eyYCkyUyKXfyMHrgQJnkAsxP5G8waxqVY6pG4qTVDVJHA&bt\\_ts=1600992087492](https://www.cnn.com/2020/09/24/tech/amazon-ring-drone/index.html?utm_term=160099208749136876e0f79ef&utm_source=Nightcap+-+9.24.2020&utm_medium=email&utm_campaign=246352_1600992087492&bt_e=Az8%2FYqRUfGgSPphy480eyYCkyUyKXfyMHrgQJnkAsxP5G8waxqVY6pG4qTVDVJHA&bt_ts=1600992087492)

## Industry group raises concerns around proposed ban on Chinese-made drones

MAGGIE MILLER 09/24/20



A clause in the House-passed 2021 National Defense Authorization Act would prohibit federal procurement or operation of certain foreign-made drones, including those from China, due to national security concerns.

The Alliance for Drone Innovation – which represents major drone-related companies, including Chinese technology group Da-Jiang Innovations (DJI) – pushed back against the clause in a letter sent to the leaders of the House and Senate Armed Services Committees this week.

“By imposing a ban on the procurement and operation of foreign-made drones in the final conference report, this provision would be detrimental to the U.S. drone industry,” the Alliance wrote to the lawmakers. “While it may seem counterintuitive, we believe a ban on drones and



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drone components from outside America would actually hurt the development of the U.S. drone industry. Manufacturing a drone simply cannot be done today without parts and knowledge from all over the world, and a country-based ban would hurt the Americans who build drones as well as the Americans who use them for recreation, business, conservation, and even saving lives.” <https://thehill.com/policy/technology/518129-industry-group-raises-concerns-around-proposed-ban-on-chinese-made-drones>

### **Global Hawk receives camera, electronic support upgrades** Editorial Team September 25, 2020

Northrop Grumman has delivered two payload upgrades for the RQ-4 Global Hawk long-endurance UAV. The first is the deployment of the MS-177 multi-spectral camera, which provides improved high resolution imaging.



“The camera system provides multiple channels of intelligence collection in visible and infrared bands and provides a dramatic increase in multi-spectral imaging capacity. When paired with a Global Hawk platform, the MS-177 provides collection coverage in areas that cannot easily be reached by other means.” Collins

Aerospace says the sensor can provides superior resolution over longer ranges than any other ISR sensor in the US inventory. It is an evolution of the Senior Year Electro-optical Reconnaissance System sensor used on the Lockheed Martin U-2S spyplane. The second upgraded involves the fielding of the AN/ASQ-230 increment 1, which enhances the aircraft’s “support against electronic threats.” <https://cis455.com/global-hawk-receives-camera-electronic-support-upgrades-news/>

### **IRGC Navy receives new UAVs** 24 SEPTEMBER 2020 Jeremy Binnie

The naval wing of Iran’s Islamic Revolution Guards Corps (IRGC) has taken delivery of **188** unmanned aerial vehicles that includes three new types that can take off from the force’s small boats, the IRGC announced on 23 September.



*An Ababil-3 is seen next to a fast attack craft with an Ababil-2 mounted on its roof where a multiple-rocket launcher is normally fitted. The boat is around 11 m long.*

It released low-resolution photographs on its website and news agencies showing the UAVs that were displayed at its main naval



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base at Bandar Abbas during the handover ceremony. These included 15 Mohajer-6s, a type that can carry four small guided bombs and is already in service with the IRGC Aerospace Force; 12 Ababil-3s, a common Iranian surveillance type, and 27 Yasirs, a type that resembles the widely used Sca eagle.

The photographs also showed more than 30 UAVs that appeared to be Arabil-2s, a type that can carry a surveillance system or a warhead and has been extensively used in Yemen in recent years. Some were seen mounted on small boats, suggesting they could be brought up to launch-speed at sea to give the IRGC's attack craft a new long-range guided weapon, albeit a slow one with a small warhead. <https://www.janes.com/defence-news/news-detail/irgc-navy-receives-new-uavs>

### **Sonin Hybrid Unveils Revolutionary 140mph+ Drone** September 24, 2020 News



Atlanta-based drone manufacturer Sonin Hybrid has just unveiled a revolutionary 140MPH+ drone (with FAA waiver) built exclusively for first responders. It has a fully-equipped flight time over **three hours** and can reach speeds over **three times faster** than most of the fastest commercial drones available today.

Despite the number of police, firefighters and government officials flying drones as part of their duty to protect and serve, few drones are designed for first responders. The Recruit drone uses Sonin Hybrid's patent-pending gasoline and battery-powered system to recharge batteries while in flight. The Recruit is also equipped with a high-tech payload including 30X optical/12X digital zoom 4K video camera with fixed and mobile target tracking, Forward Looking InfraRed camera with night vision, PA speakers, spotlight and additional sensors for first responder missions. Coupled with a carbon fiber body, lightweight airframe and Sonin's hybrid system, the Recruit can fly longer and faster than traditional drones.

[https://uasweekly.com/2020/09/24/sonin-hybrid-unveils-revolutionary-140mph-drone/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=sonin-hybrid-unveils-revolutionary-140mph-drone&utm\\_term=2020-09-25](https://uasweekly.com/2020/09/24/sonin-hybrid-unveils-revolutionary-140mph-drone/?utm_source=rss&utm_medium=rss&utm_campaign=sonin-hybrid-unveils-revolutionary-140mph-drone&utm_term=2020-09-25)

### **NASA Invites Media, Public to Watch Cargo Launch to Space Station** Sept. 24, 2020

NASA commercial cargo provider Northrop Grumman is targeting 10:27 p.m. EDT Tuesday, Sept. 29, for the launch of its 14th resupply mission to the [International Space Station](#). Live coverage of the launch from [Wallops Flight Facility](#) on **Wallops Island, Virginia**, will air on NASA



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Television and the agency's [website](#), with prelaunch events Monday, Sept. 28, and Tuesday, Sept. 29.



Loaded with nearly 8,000 pounds of research, crew supplies, and hardware, Northrop Grumman's Cygnus cargo spacecraft will launch on the company's Antares rocket from **Virginia Space's Mid-Atlantic Regional Spaceport**.

The Cygnus spacecraft, dubbed the SS [Kalpana Chawla](#), will arrive at the space station Saturday, Oct. 3. After Cygnus capture, mission control in Houston will send ground commands for the station's robotic arm to rotate and install it on the bottom of the station's Unity module. Cygnus is scheduled to remain at the space station until mid-December, when it will depart the station.

Members of the public can attend the launch virtually, receiving mission updates, and opportunities normally received by on-site guests. Complete coverage of launch activities is as follows: <https://www.nasa.gov/press-release/nasa-invites-media-public-to-watch-cargo-launch-to-space-station>

**27Sep20**

### **NASA working with cosmetics company on space station commercialization** Jeff

Foust September 24, 2020



WASHINGTON — NASA is taking the next small step in its efforts to promote commercialization of low Earth orbit by flying a cosmetics company's product to the International Space Station, a project that has prompted questions from one senator.

Among the payloads on a Northrop Grumman Cygnus cargo spacecraft launching to the ISS Sept. 29 are 10 bottles of a face cream by Estée Lauder. The bottles will be photographed in the cupola of the station, with the Earth as a backdrop, and the company will use the images in social media campaigns.

Estée Lauder will pay NASA approximately **\$128,000** for transporting the bottles to and from the station and conducting the photography. The Estée Lauder payload is part of a broader effort by NASA to support commercialization of LEO as it seeks to eventually transition from the



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ISS to commercial space stations. <https://spacenews.com/nasa-working-with-cosmetics-company-on-space-station-commercialization/>

28Sep20

### General Atomics' Sparrowhawk Drone-Launched Drone Breaks Cover JOSEPH

TREVITHICK SEPTEMBER 25, 2020 THE WAR ZONE

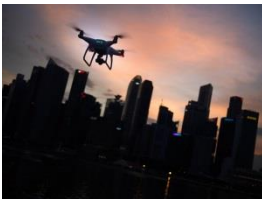


General Atomics says it has conducted captive carry tests of its Sparrowhawk, a new small drone that will be launched and recovered in flight. The company says it is a demonstrator and was developed specifically to work with other larger unmanned aircraft that it builds, such as the [MQ-9 Reaper](#) and [MQ-1C Gray Eagle](#), offering an important stepping stone to new capabilities

on those existing designs, as well as future ones.

The California-based drone's maker said the captive carry tests, in which the drone was carried aloft by an MQ-9, but was not launched, took place between Sept. 16 and 17, 2020. This kind of testing is done to gather data on how a system, as well as the launch platform in many cases, handles the stress of flight. <https://www.thedrive.com/the-war-zone/36747/general-atomics-sparrowhawk-drone-launched-drone-breaks-cover>

### Drones a cyber security threat? SEPTEMBER 25, 2020



The Australian Government has released a consultation paper for **commercial drone use**, highlighting the benefits and risks of drone technology, with the goal to map out a 'comprehensive national policy'.

Unmanned Aerial Vehicles are providing new economic and innovative opportunities for various industries, with the '(global) market value of drone powered businesses... around AUD \$163 billion', but the government concedes the technology comes with numerous risks, particularly relating to the misuse of drones and the data they collect.

The 68-page document, *Emerging Aviation Technologies: National Aviation Policy Issues Paper*, released by deputy prime minister Michael McCormack's Department of Infrastructure, shows the government has a grasp on the complexities of the fast-paced drone industry.





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The paper kicks off with some interesting insights. For instance, there is no accurate information regarding how many drones are in Australia, with estimates range from 50,000 to one million. As of mid-June there are 16,300 CASA-certified Remote Pilot Licence holders. The paper cites numerous third-party research regarding the economic value and potential growth of drone technology. The \$163 billion market value came from a 2017 Pricewaterhouse Cooper analysis. <https://www.insideimaging.com.au/2020/drones-a-cyber-security-threat/>

### How Worried are Drone Pilots About Data Security? The DRONELIFE Minute

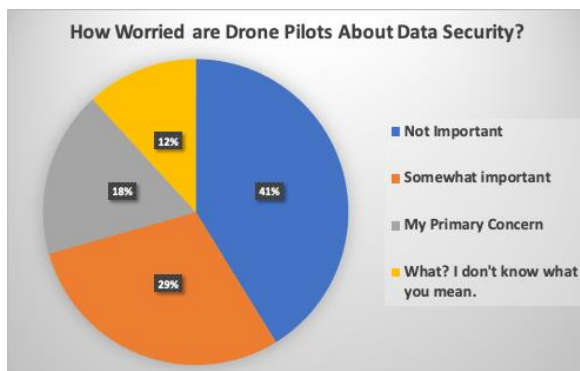
**Survey** Harry McNabb September 27, 2020



With a proposed ban on Chinese made technology, increased focus on drone tech by homeland security and expanded use of drones by public safety agencies and large enterprise, drone data security has been in the news a lot lately. Drone manufacturers are working to close any security gaps, publish audits and emphasize the data safety their platforms provide.

Drone platforms are getting more sophisticated, more useful, and more secure – and that’s all good news for the industry as the technology matures. But despite all of the news stories concerned with data security, we wondered how many pilots were truly worried about it when they choose a drone? That’s what we asked in our most recent DRONELIFE Minute Survey.

There are a lot of very [significant drone business surveys](#), and a lot of [very official forecasts](#) for the drone industry. The DRONELIFE Minute Survey makes no claim to be either – it’s a way to share some of the prevailing buzz that comes our way from readers on a variety of subjects, and for us to track changes over time on topics that we feel would be of interest.



It seems that despite the headlines, most respondents really aren’t primarily concerned about data security for the jobs they are doing. After all, most drone jobs aren’t for military purposes or in nuclear power plants – and more than half of the commercial pilots who responded to our survey didn’t find data security a primary concern. (In fact, 11.8% didn’t really know what we were talking about.)

<https://dronelife.com/2020/09/27/how-worried-are-drone-pilots-about-data-security/>



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### A HUMAN KIDNEY JUST FLEW OVER 10 MILES IN A DRONE September 24,

2020 Sally French 0 News,



Drone delivery company MissionGo sent a kidney into the skies above Nevada as part of a partnership with organ procurement organization Nevada Donor Network. The drone, which delivered a research kidney from an airport to a location outside of a small town in the Las Vegas desert, marks what MissionGo claims is **the longest recorded organ delivery flight** in drone history.

MissionGo also conducted another flight as part of the partnership with Nevada Donor Network to carry human tissue. That flight delivered research corneas from Southern Hills Hospital and Medical Center to Dignity Health – St. Rose Dominican, San Martín Campus. Both flights occurred on Sept. 17.



“The research conducted during last week’s test flights is another data point to illustrate that unmanned aircraft are a reliable mode of transportation for life-saving cargo, and...are safe for both the payload and people on the ground – even at greater distances,” said Anthony

Pucciarella, MissionGO President. <http://thedronegirl.com/2020/09/24/missiongo-kidney/>

### REAL ESTATE DRONES GET THEIR MOMENT WITH CORONAVIRUS

RESTRICTIONS September 28, 2020 Sally French News



Can’t tour your future dream home in-person due to local limitations on real estate showings — or because you just don’t want to travel to see a potential home? Real estate drones can help.

45% of homebuyers said they made a bid on a home without first seeing it in person, up from 28% in 2019, according to a [July 2020 survey from real estate site Redfin](#).

“I predict that by the end of the 2020 homebuying season, the **majority** of homebuyers will have made a sight-unseen offer,” said Redfin chief economist [Daryl Fairweather](#) in a prepared statement. “The pandemic has changed the way many people view homes, and on top of that, the market is highly competitive. If you aren’t using this strategy, another buyer who is could beat you to the punch.”





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“Drones matter more because videos matter more,” said [John Castle](#), an investment real estate agent based in Ottawa, Canada. “To minimize exposure, buyers want to get a fuller sense of a property before visiting. Photography, virtual tours, 3D floor plans, and video help the buyer get a better sense of the property without having to see it in-person. No video is complete without an overhead drone shot of the house and the neighborhood to put the house in context.” <http://thedronegirl.com/2020/09/28/real-estate-drones-coronavirus/>

### **SKYDIO 2 REVIEW: YES, IT'S A FREAKISHLY SMART DRONE** June 25, 2020 Sally French Video



Flying drones admittedly gives me mild anxiety at times. When I set off the [Skydio 2](#). It took off, hovered for a bit as I ooh'd and aww'd, and then it took off on the first automated flight.

I didn't waste a lot of time after takeoff before tapping “Orbit” on the Skydio 2 app — and the drone immediately took off rather quickly and toward a park awning (its max speed is 36 mph). But the drone didn't crash. It increased its elevation a couple feet, seamlessly gliding over the awning and then circling back around. I flew Skydio 2 in a wooded area. I sent it around trees. I walked through paths shrouded by trees. It never crashed. What is Skydio 2?

Skydio 2 is an incredibly smart, follow-me drone. Equipped with six, 200-degree color cameras, it can see everything in every direction so it theoretically never crashes. It costs **\$999**. Unlike other follow-me drones that rely on following a device attached to you, the Skydio uses its cameras to lock onto you. But not only does the camera watch you. It's watching everything around it, ensuring it doesn't hit those things and calculating how to navigate around them in the event it otherwise would hit you. <http://thedronegirl.com/2020/06/25/skydio-2-review/>

### **Skydio and EagleView partner to offer new property inspection service**

MANUFACTURER NEW PRODUCTS NEWS SKYDIO UNITED STATES SAM LEWIS SEPTEMBER 28, 2020



EagleView, which specializes in aerial imagery, data analytics and GIS solutions, today announced its new partnership with Skydio, a prolific US drone manufacturer and autonomous flight specialist. The duo has agreed upon a multi-year, multi-million-dollar exclusive partnership to deliver

Skydio House Scan to several major country markets. The companies said this will result in the **largest ever** commercial drone deployment, with **thousands of units deployed worldwide**.



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"EagleView's images are already 16 times clearer than those of satellites, and with Skydio's drones you'll be able to not only spot a dime on the roof but see the face of Franklin D. Roosevelt stamped on it." Meanwhile, Adam Bry, CEO of Skydio, said, "Together with EagleView, we provide insurance carriers, claims adjusters, construction companies and government bodies with a first-of-its-kind integrated solution that automates the entire inspection process. <https://www.commercialdroneprofessional.com/skydio-and-eagleview-partner-to-offer-new-property-inspection-service/>

### **Autel Robotics Dragonfish VTOL drone has an 18-mile range** Josh Spires Sep. 28th 2020



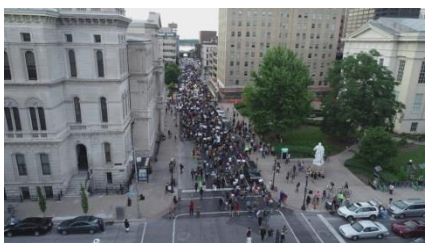
Autel Robotics [advertises the Dragonfish](#) with the slogan, "Subvert Tradition, Command the future." The Dragonfish is stated as having a maximum flight time of **120 minutes**, an 18.6-mile video transmission range, and the ability to get in the air in under 4 minutes. The drone also boasts a 4k camera with 20x optical zoom and infrared detection from up to 200 meters away.

Dragonfish has a maximum flight speed of 67 miles per hour and is capable of flying in winds of up to 31 miles per hour. The drone has a maximum take-off weight of 17.2 pounds, with 3.3 pounds of that being reserved for payloads. The Dragonfish is also accurate down to one centimeter with a measurement error of one part per million.

The drone from Autel Robotics is focused on public safety, firefighting, energy, traffic management, agricultural and surveillance applications. <https://dronedj.com/2020/09/28/autel-robotics-dragonfish-vtol-drone-has-an-18-mile-range/>

**29Sep20**

### **Police Drones Capture 'Beautiful and Ugly Truths' Of Louisville Protests** Ryan Van Velzer September 17, 2020



The footage opens with a quick pan of traffic crossing Eighth Street and Broadway. The audio captures chatter over the police scanner and the revving engine of a passing car. The camera hones in on a small crowd gathered on the street corner. Most begin to run, then slow and turn back, inquisitively. One person points a flashlight.



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"The first thing... that they throw something at it, light 'em up," an officer says. The camera pans down to a couple men standing on the corner in the amber streetlight. It's a news crew. The videographer points his camera upwards. "He's filming us, go back up," the officer says.

The video comes from a drone owned and operated by Kentucky State Police. With demonstrations erupting all over the country, Louisville residents took to the streets in large numbers beginning in late May. KSP flew commercial drones to monitor downtown, capturing dramatic scenes of conflict, defiance and peaceful protest. <https://wfpl.org/police-drones-capture-beautiful-and-ugly-truths-of-louisville-protests/>

### **"Where the Veil is Thin" ~ Campton Bog** Peter Bloch PRO



"Thin Places" is an ancient Celtic spiritual concept describing special places where the separation between our earthly experience is lifted to a higher level, where something mysterious and transcendent infuses the moments with timelessness and bliss. Thin Places are locations where the veil between the temporal world and the infinite is so thin that we can exist in both realms at one time.

That was my experience of Campton Bog in late September 2020. From the moment I set eyes on it from the boat ramp area, I was transfixed. Our 6 hours on these glorious wetlands were an uninterrupted celebration of the beauty of nature and New Hampshire autumn foliage.

This movie was made mostly using a stabilizing gimbal that I have attached to my kayak, it provides the super-silky-smooth motion that makes my video live up to the high standards of mother nature. There are a few clips shot with a drone. They provide some context from above of The Bog, but the natural lighting at that moment was hazy and flat. The rest is all the natural colors. The music is Johan Sebastian Bach's Adagio BWV 974, performed by Michele Nobler, courtesy of AudioBlocks. <https://vimeo.com/453636276>

### **Lift-off for China's high-altitude helicopter drone prototype** Liu Zhen in Beijing 29 Sep, 2020 South China Morning Post

China has tested a high-altitude drone helicopter designed for missions on [the country's disputed border with India](#), according to state media reports.



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A prototype of the AR-500C unmanned aerial vehicle completed its maiden flight at an airport 14,450 feet above sea level in Sichuan province in southwestern China, neighboring Tibet, on Sunday.

During the 15-minute flight, the Chinese-designed and built drone completed a series of tests including climbing, hovering and rotating before steadily landing, its developer, state-owned

Aviation Industry Corporation of China, said Monday.

The AR-500C is meant to be a reconnaissance and communication hub that can also serve as an electronic jammer, guide weapons fire, and detect nuclear radiation or chemical contamination.

The test flight confirmed that the drone could carry a payload of **176lbs** and stay aloft for more than **five hours**. Avic said the drone could deliver cargo to the high-altitude Tibetan Plateau.

<https://www.scmp.com/news/china/military/article/3103535/lift-chinas-high-altitude-helicopter-drone-prototype>

## DARPA Conducts Fourth OFFSET Autonomous Swarm Experiment 27 Sep 2020 Mike Ball



DARPA has recently conducted the fourth field experiment for its OFFSET (OFFensive Swarm-Enabled Tactics) program, during which swarms of autonomous air and ground vehicles were tested at the Leschi Town Combined Arms Collective Training Facility at Joint Base Lewis-McChord in Washington. The OFFSET program aims to develop large-scale teams of collaborative autonomous systems such as UAVs and UGVs that are capable of supporting ground forces operating in urban environments.

The main Swarm Systems Integrators for the project are Northrop Grumman Mission Systems and Raytheon BBN Technologies, who are creating swarm systems architectures, advanced interfaces and virtual and physical swarm testbeds. During this experiment, the Integrators tested autonomous UGVs and fixed-wing and multirotor UAVs in a multi-stage interactive scenario that required the vehicles to locate and secure multiple simulated items of interest in an urban operational scenario.

The swarm commanders selected particular tactics and strategies for the test series according to a particular swarm's capabilities. Using real-time swarm data and scenario analysis provided



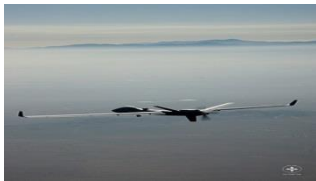
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by the DARPA experimentation team after each run, the Swarm Systems Integrators extracted insights from each mission and generated new strategies to improve their following test runs, in addition to future technology development.

[https://www.unmannedsystemstechnology.com/2020/09/darpa-conducts-fourth-offset-autonomous-swarm-experiment/?utm\\_source=UST+eBrief&utm\\_campaign=219786d716-eBrief\\_2020\\_29Sept&utm\\_medium=email&utm\\_term=0\\_6fc3c01e8d-219786d716-119747501](https://www.unmannedsystemstechnology.com/2020/09/darpa-conducts-fourth-offset-autonomous-swarm-experiment/?utm_source=UST+eBrief&utm_campaign=219786d716-eBrief_2020_29Sept&utm_medium=email&utm_term=0_6fc3c01e8d-219786d716-119747501)

### **GA-ASI Completes First Protector Unmanned Aircraft** September 28, 2020

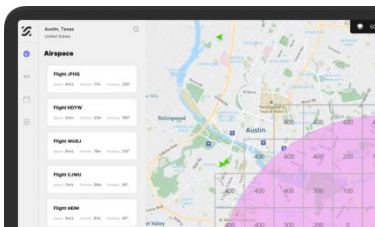
Military | News



On September 25<sup>th</sup> General Atomics Aeronautical Systems, Inc. completed the first flight of the Protector RG Mk1 Remotely Piloted Aircraft System, the fourth MQ-9B SkyGuardian<sup>®</sup> air vehicle. The first Protector RPAS, known within GA-ASI as UK1, will be used to support system testing as part of a combined UK Ministry of Defence, U.S. Air Force and GA-ASI test team. Upon completion of this initial testing, UK1 will be delivered to the United Kingdom Ministry of Defence in the summer of 2021.

MQ-9B is GA-ASI's most advanced RPAS. It is available as the SkyGuardian, the maritime SeaGuardian<sup>®</sup> or, as with the UK Protector, in a special customer specified configuration. The first customer delivery will be to the UK, but it has also been selected by the [Belgian Defense](#) and [Australian Defence Force](#), with significant interest from customers throughout the world. [https://uasweekly.com/2020/09/28/ga-asi-completes-first-protector-unmanned-aircraft/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=ga-asi-completes-first-protector-unmanned-aircraft&utm\\_term=2020-09-29](https://uasweekly.com/2020/09/28/ga-asi-completes-first-protector-unmanned-aircraft/?utm_source=rss&utm_medium=rss&utm_campaign=ga-asi-completes-first-protector-unmanned-aircraft&utm_term=2020-09-29)

### **SkyGrid introduces new app to automate “every phase of flight”** HEADLINE NEWS ALEX DOUGLAS SEPTEMBER 29, 2020



Now available for **free** in the iPad App Store, SkyGrid Flight Control™ simplifies mission planning and execution, allowing drone operators to autonomously surveil a defined area and detect objects in real-time. Powered by artificial intelligence computer vision, the solution enables more efficient search and rescue missions, disaster response, perimeter surveillance and site inspections.





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Amir Husain, CEO and founder, said “SkyGrid has minimized the burden on drone operators by creating one solution that automates airspace, flights, and insights. As the **only** drone solution built on AI and blockchain technologies, we give operators and enterprises the assurances they need to execute safe, compliant missions.”

SkyGrid Flight Control enables drone operators to **automate** airspace authorization, mission planning, flight execution, and object detection in one end-to-end solution.

<https://www.commercialdroneprofessional.com/skygrid-introduces-new-app-for-drone-operators-and-enterprises-to-automate-every-phase-of-flight/>

### **Cerbair reveals Chimera: New counter-UAS system** Scott Simmie Sep. 29th 2020



As drones continue to grow in popularity, so too does the demand for counter-UAS technology. Police and other authorities want solutions that can neutralize a drone over an urban area without the use of projectiles or nets. A French manufacturer, Cerbair, believes its new counter-UAS system

could be part of the solution.

There's been no shortage of examples in the past couple of months. Now, French company [Cerbair](#) has announced a new counter-UAS device. It was created, says the company, after repeated requests from police, armed forces and industrial clients who were looking for an affordable solution.

The Chimera system works in three phases. First, it continuously scans the radio frequency spectrum, looking for activity on bandwidths that would indicate drone activity. Then, by manually positioning a directional antenna, the operator can hone in on the location of the drone and its pilot. Once the target has been determined, the operator can trigger the weapon to fire an electromagnetic impulse that will disable the drone and force it to the ground. This can happen even while the drone is still Beyond Visual Line of Sight. <https://dronedj.com/2020/09/29/new-anti-drone-system/>

**30Sep20**

### **UAS Groups Prod DOT on Remote ID Rule** Mark Huber September 29, 2020



A trio of UAS industry groups is urging the FAA to not delay the intended December release of rulemaking covering remote identification requirements for unmanned aerial systems. In a letter sent Tuesday to U.S.

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Transportation Secretary Elaine Chao, the Association for Unmanned Vehicle Systems International, the Consumer Technology Association and the U.S. Chamber of Commerce's Technology Engagement Center encouraged the Department of Transportation and the FAA to proceed without delay and "support a final rule that sets **performance requirements**, rather than specifying particular solutions for remote ID compliance."

The industry groups noted that remote ID standards will be "the linchpin needed for future rulemaking to pave the way for transformative uses of UAS with significant benefits for our economy and society." They also pointed out other benefits of the technology, including real-time UAS identification, safer and more secure airspace, the role the technology is likely to have in developing UAS traffic management and "driving public acceptance of UAS."

<https://www.ainonline.com/aviation-news/general-aviation/2020-09-29/uas-groups-prod-dot-remote-id-rule>

### **NATO's Autonomous Drone Delivery Experiment Works** Miriam McNabb September 29, 2020



DroneUp recently partnered with North Atlantic Treaty Organization Allied Command Transformation, Joint Force Development Directorate, Operational Experimentation branch in an experiment designed to determine if autonomous delivery of a specified payload to identified recipients under field conditions could be proven viable.

The experiment took place on September 21, 2020 in Lawrenceville, VA and included Pale Horse Weapons Institute, Daniel Defense, Ultimate Training Munitions and WeaponLogic. Soldiers running out of ammunition hit a button that signals a drone to fly to that individual soldier and drop a payload – which can be unique to that individual. The drone then returns home for the next mission.

"DroneUp provided a patent-pending technology delivery solution and experiment execution for the operational experiment which was led by Lieutenant Colonel Michael Atkinson, MBE, British Army. The experiment requirements included (1) Identifying and delivering a specified payload to three different recipients, (2) delivering payloads unique to each recipient, (3) locating the recipient, (4) delivering the payload autonomously and (5) confirming the correct unique payload. Further, the requirements had to prove where the recipient was static or mobile." <https://dronelife.com/2020/09/29/natos-autonomous-drone-delivery-experiment-works/>



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### Air Force Picks Nine Awardees for Potential \$400M Skyborg UAV Prototyping

**Support IDIQ** Brenda Marie Rivers September 30, 2020 Contract Awards, News



The award includes delivery orders for prototype development and experimentation support for the Skyborg Vanguard Program, the Department of Defense said Tuesday. Under the new award, contractors will work to develop and test a suite of autonomous technologies for the unmanned aerial vehicle to support its combat operations with manned teammates.

The Air Force Life Cycle Management Center received 18 bids for the IDIQ contract through a competitive acquisition process. Contact work will take place in various U.S. locations through July 2026.

The awardees are: AeroVironment, Autonodyne, BAE Systems, Blue Force Technologies, Fregata Systems, Lockheed Martin, NextGen Aeronautics, Sierra Technical Services and Wichita State University. <https://www.govconwire.com/2020/09/air-force-picks-nine-awardees-for-potential-400m-skyborg-uav-prototyping-support-idiq/>

### SkyGrid Launches SkyGrid Flight Control PRESS 2020-09-29 UAV Expert News



[SkyGrid](#), a [Boeing](#), SparkCognition company, today launched a new application for drone operators and enterprises to **automate every phase of flight in one unified solution**. Now available **for free** in the iPad App Store, SkyGrid Flight Control™ simplifies mission planning and execution, allowing drone operators to autonomously surveil a defined area and

detect objects in real-time. Powered by **artificial intelligence computer vision**, the solution enables more efficient search and rescue missions, disaster response, perimeter surveillance and site inspections.

“Traditionally, drone operators have used several different tools to check airspace, get LAANC, plan and execute flights, but it’s a manual, cumbersome process,” said Amir Husain, CEO and founder of SkyGrid. “We have minimized the burden on drone operators by creating one solution that automates airspace, flights and insights. As **the only drone solution built on AI and blockchain technologies**, we give operators and enterprises the assurances they need to execute safe, compliant missions.”



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SkyGrid Flight Control enables drone operators to automate airspace authorization, mission planning, flight execution and object detection in one end-to-end solution. [https://www.uavexpertnews.com/2020/09/skygrid-launches-skygrid-flight-control/?utm\\_source=Master&utm\\_campaign=12f411cb05-EMAIL\\_CAMPAIGN\\_2017\\_12\\_20\\_COPY\\_01&utm\\_medium=email&utm\\_term=0\\_35ad7bc94d-12f411cb05-89168288](https://www.uavexpertnews.com/2020/09/skygrid-launches-skygrid-flight-control/?utm_source=Master&utm_campaign=12f411cb05-EMAIL_CAMPAIGN_2017_12_20_COPY_01&utm_medium=email&utm_term=0_35ad7bc94d-12f411cb05-89168288)

**Does this US military uniform suggest it is preparing for war with China?** Kristin Huang *South China Morning Post* 29 Sep, 2020



*Patches on uniforms made for the exercise showed a drone superimposed over a red silhouette of China.*

The [United States](#) has staged a simulated island assault exercise featuring a red silhouette of China on air personnel's uniforms, in what Chinese state media described as a provocative gesture.

The drill, to be completed on Tuesday, was being conducted in California, but triggered warnings from Chinese state media that China would fight back if the US attacked it in the [South China Sea](#). In the drill, Exercise Agile Reaper, three MQ-9s partnered with the US Navy's Third Fleet, which deployed carrier strike groups, submarines and other vessels and aircraft to the eastern Pacific, along with transport aircraft C-130s, and special warfare and Marine Corps personnel.

The reapers performed air strikes during a mock amphibious assault on San Clemente Island off the Californian coast. "It's a demonstration of our capability to rapidly move the MQ-9 anywhere in the world and show the operational capabilities of the MQ-9," US 29th Attack Squadron Commander Lieutenant Colonel Brian Davis told the magazine. <https://www.scmp.com/news/china/military/article/3103464/does-us-military-uniform-suggest-it-preparing-war-china>



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1Oct20

### **Sabrewing Aircraft Company Announces \$600 Million Dollars in Orders** September 29, 2020 News



[Sabrewing Aircraft Company](#) has announced an exclusive representation agreement with Arabian Development & Marketing Co headquartered in Riyadh, Saudi Arabia. The deal includes an order for **102** Sabrewing “Rhaegal-B” unmanned, heavy-lift, Vertical Take-Off Landing, cargo aircraft. ADMC will soon begin taking additional aircraft

orders throughout the GCC and Africa. The aircraft was recently unveiled to the public during an U.S. Air Force Agility Prime event. The deal between ADMC and Sabrewing also includes establishing aircraft assembly, maintenance, repair, and overhaul facilities throughout the Kingdom of Saudi Arabia and Africa to service the Rhaegal-B fleet and will provide technology jobs to the region.

Sabrewing’s “Rhaegal” air vehicle has a turbo-electric drivetrain that is capable of taking off and landing vertically – in mud, snow, ice, deep sand or unimproved landing areas – at speeds of up to 200 knots and in weather that is all but impossible for manned aircraft.

The Rhaegal is:

- Remotely piloted for commercial operations and fully autonomous for military applications.
- Delivers 5,400-pound payload flying at altitudes of up to 22,000 feet and has a range of up to 1000 nautical miles.
- The wings fold on the ground for easy ground handling and in the air during hover for landing in tight spaces,
- The Rhaegal’s “fold-up” nose requires no special equipment for loading or unloading cargo in remote locations.

[https://uasweekly.com/2020/09/29/sabrewing-aircraft-company-announces-600-million-dollars-in-orders/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=sabrewing-aircraft-company-announces-600-million-dollars-in-orders&utm\\_term=2020-09-30](https://uasweekly.com/2020/09/29/sabrewing-aircraft-company-announces-600-million-dollars-in-orders/?utm_source=rss&utm_medium=rss&utm_campaign=sabrewing-aircraft-company-announces-600-million-dollars-in-orders&utm_term=2020-09-30)



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### Japan Airlines and Volocopter Sign Agreement to Launch Air Mobility Services in Japan September 29, 2020 News



In February 2020, Japan Airlines Innovation Fund invested in Volocopter, which is aiming to create and bring next-generation electrically powered air taxis and heavy lift cargo drone technology to the market. The agreement outlines that Volocopter and JAL work on permanent **sustainable commercial operations of air taxis** in Japan. By establishing local partnerships, jointly approaching Japanese cities and prefectures and working on market demand and social acceptance, JAL and Volocopter will prepare for commercial launch in Japan within the **next 3 years**.

The company has raised a total of **122 million euro** in equity. Investors include Daimler, Geely, DB Schenker, Intel Capital, Team Europe, btov, Micron, Mitsui Sumitomo Insurance Group, TransLink Capital (Japan Airlines and Sompo Japan Insurance), MS&AD Ventures, and Manta Ray Ventures. [https://uasweekly.com/2020/09/29/japan-airlines-and-volocopter-sign-agreement-to-develop-and-launch-air-mobility-services-in-japan/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=japan-airlines-and-volocopter-sign-agreement-to-develop-and-launch-air-mobility-services-in-japan&utm\\_term=2020-09-30](https://uasweekly.com/2020/09/29/japan-airlines-and-volocopter-sign-agreement-to-develop-and-launch-air-mobility-services-in-japan/?utm_source=rss&utm_medium=rss&utm_campaign=japan-airlines-and-volocopter-sign-agreement-to-develop-and-launch-air-mobility-services-in-japan&utm_term=2020-09-30)

20Oct20

### AeroVironment unveils anti-armour Switchblade 600 loitering munition Garrett Reim 1 October 2020

Switchblade 600 is the first in a series of new loitering munitions the unmanned air vehicle manufacturer plans to offer, the company said on 30 September.



The new loitering munition weighs **50lb**, is man-portable and can be set up for deployment from a launch tube in less than 10min. It also can be configured for launch from a vehicle or slow-moving aircraft.

The UAV is powered by an electric battery and propeller. It has endurance to fly 43nm and make multiple orbits above a target before striking. That equates to about 40min of flight endurance. It has a dash speed of 100kt.



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Like its smaller predecessor, the anti-personnel Switchblade 300, the new loitering munition has a set of four wings that pop out, like a switchblade, after launching from a tube using compressed gas.

The Switchblade 600 has a set of electro-optical/infrared cameras inside a nose-mounted gimbal for navigation, surveillance and targeting. The weapon can lock onto and dive bomb a fixed or moving target. It also can be automatically waved off in case nearby friendly forces or civilians are present. The loitering munition is piloted with a tablet-based fire control system that allows operators to guide the UAV to the target manually or autonomously.

<https://www.flightglobal.com/military-uavs/aerovironment-unveils-anti-armour-switchblade-600-loitering-munition/140409.article>

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