



UAS and SmallSat Weekly News

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20Aug22

CH-4 drone makes maiden flight with upgraded engine, longer endurance, and heavier loads Global Times Aug 17, 2022



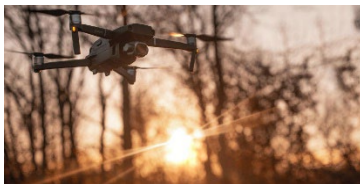
The domestic engine enables the updated version of the CH-4 drone to fly at higher altitudes for longer endurance and with heavier loads, said the aircraft's maker on Wednesday.

The self-developed CH-4 drone with a heavy-fuel engine has recently completed scientific research tests in which it successfully carried out autonomous takeoff and landing, waypoint flight, full load transportation and tests under maximum flight altitudes and endurance, the Global Times learned from CH UAV company on Wednesday.

The heavy-fuel engine was completely domestically made from development to production, said Shi Wen, chief engineer of the CH series drone. The engine offers low fuel consumption, long flight endurance and a wide range of application environments, Shi said.

The CH-4 is one of the best-selling armed reconnaissance drones on the international market. It can also serve civilian purposes like high-resolution land observation, mapping, communications, aerial object detection, environmental monitoring, and forest fire prevention. <https://www.globaltimes.cn/page/202208/1273249.shtml>

SkyeBrowse Android app for DJI, Autel drones is now available Ishveena Singh - Aug. 19th 2022



The one-click 3D modeling app supports as many as 20 drones.

SkyeBrowse's proprietary [videogrammetry](#) software can create accurate 3D models within minutes without training. The solution is designed for first responders and public safety officials.

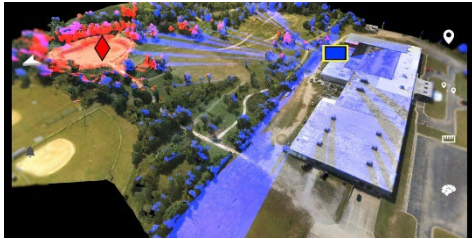
SkyeBrowse said its app has helped departments to document accidents and crime scenes in 90 seconds instead of three hours. Then there is a thermal mapping mode that allows live structure fires to be 3D modeled in two minutes. Meanwhile, with WideBrowse, 50 acres can be mapped in five minutes for natural disasters.



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That's not all. Hazmat runoffs are also cleared 90% faster with SkyeBrowse. Preplanning for critical infrastructure can also be done with a five-minute flight. You can download the app [here](https://dronedj.com/2022/08/19/skyebrowse-dji-drone-android-app/). <https://dronedj.com/2022/08/19/skyebrowse-dji-drone-android-app/>

Teal Drones now supports multi-drone mapping for tactical missions Ishveena Singh - Aug. 19th 2022



Military-grade drone company Teal Drones says it has partnered with defense tech specialist Reveal Technology on mapping software that automatically combines imagery from multiple drones to produce high-fidelity 3D maps.

This partnership matters because military tactical teams' ability to quickly produce accurate maps of areas targeted for military operations can mean the difference between mission success or failure. As part of this collab, Reveal's "Farsight" mapping software was recently demonstrated to US Army Special Operations Command in North Carolina.

A division of [Red Cat Holdings](#), Teal Drones launched the [4-Ship](#) multi-drone system in June to enable a single operator to simultaneously control up to four of its Golden Eagle drones. While 4-Ship allows for instant and ongoing 360-degree surveillance of a target, Farsight gives military teams near-real-time access to detailed 3D maps of a target area that can be overlaid with:

- Line-of-sight analysis, which allows a team to choose a route at the target area that is least visible to the enemy
- Terrain analysis and graphing
- An AI-generated "best route" through a target area, based on line-of-sight data, elevation mapping, and terrain analysis
- A vertical measurement tool, for determining the height of buildings and structures that may be part of an operation
- A helicopter landing zone survey, to quickly identify the best and safest spot to land

These combined features, Teal Drones says, can provide a team with an advanced awareness of the situation, leading to more successful missions. <https://dronedj.com/2022/08/19/teal-multi-drone-mapping/>



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21Aug22

Counter UAS Working Group



DRONERESPONDERS



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As we are seeing movement in the Counter UAS area, first with the The Domestic Counter-Unmanned Aircraft Systems National Action Plan and now with Congressional legislation, DRONERESPONDERS is creating a National CUAS Working Group to stay abreast of changes, share information and to support the momentum. This will be chaired by D.J. Smith with the Virginia State Police. If interested, send an email to admin@droneresponders.org. https://www.droneresponders.org/post/counter-uas-working-group?postId=ab95a1e7-1e5e-48b7-b402-b403667c7dc1&utm_campaign=e70d2290-8996-4ddc-ba44-fb75c28d2cf5&utm_source=so&utm_medium=mail&utm_content=327d87c9-66f2-4cc8-9f70-ce2476f1f1d7&cid=379b88a3-c930-4818-99e9-32725bc0a945

FAA Awards \$2.7M in Drone Research for Disaster Preparedness, Emergency Response

August 18, 2022



Federal Aviation Administration

WASHINGTON – The U.S. Department of Transportation’s Federal Aviation Administration (FAA) awarded \$2.7 million to support research on how drones can assist in disaster preparedness and in emergencies.

“Every second counts in an emergency, and this funding will allow drones to safely and more quickly deploy in moments when minutes matter,” said Acting FAA Administrator Billy Nolen.

The research will explore the use of drones in providing effective and efficient responses to different natural and human-made disasters. It will address [coordination procedures among drone operators](#) from federal agencies as well as state and local disaster preparedness and emergency response organizations. The five universities and their award amounts are:

- | | |
|------------------------------------|-------------|
| • University of Vermont | \$1,195,000 |
| • University of Alabama Huntsville | \$828,070 |
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Today's announcement is the third round of [Alliance for System Safety of UAS through Research Excellence \(ASSURE\)](https://www.faa.gov/newsroom/faa-awards-27m-drone-research-support-disaster-preparedness-emergency-response) grants, which brings the total to 20 grants valued at \$21 million for Fiscal Year 2022. <https://www.faa.gov/newsroom/faa-awards-27m-drone-research-support-disaster-preparedness-emergency-response>

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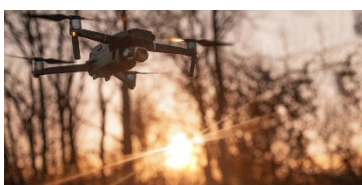
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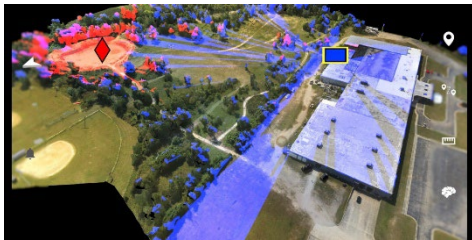
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22Aug22

Multi-Drone Mapping: Teal Drones and Reveal Technology Demonstrate for US Military

Miriam McNabb August 19, 2022 by DRONELIFE Staff Writer Ian M. Crosby



Today, [Red Cat Holdings](#) subsidiary [Teal Drones](#) announced a partnership with [Reveal Technology](#) to equip Reveal's "Farsight" mapping software with the ability to generate high-fidelity 3D maps by autonomously joining imagery from multiple unmanned aerial systems.

This significantly accelerates the rate of production, providing users with access to maps and analytics much more quickly, as was recently demonstrated to U.S. Army Special Operations Command near Fort Bragg.

Teal's 4-Ship enables the **simultaneous operation of up to four** of the company's [Golden Eagle drones by a single operator](#), granting instant and persistent 360-degree surveillance of a target. Farsight provides military teams with near real-time access to 3D maps of a target area. These maps can be overlaid with a variety of additional information including line-of-sight analysis, terrain analysis and graphing, an AI-generated "best route" through a target area, a vertical measurement tool for determining the height of buildings and structures, and a helicopter landing zone survey for identifying the optimal spot to land. These combined features grant advanced situation awareness and increase the success rate of missions.

<https://dronelife.com/2022/08/19/multi-drone-mapping-teal-drones-and-reveal-technology-demonstrate-for-us-military/>



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Navy Tests Maritime Expeditionary Use of Northrop-Built Autonomous

Helicopter Regina Garcia August 19, 2022



The U.S. Navy tested the possibility of deploying a [Northrop Grumman](#)-built autonomous helicopter from a ship to land to support maritime expeditionary operations at a recent joint service training.

An [MQ-8C Fire Scout](#) took part in the demonstration of the Navy's Expeditionary Advance Base Operations concept during the Resolute Hunter exercise. Navy personnel performed a ship-based departure simulation with the unmanned vehicle from a naval base in Point Mugu, California, and handed the system off to a portable ground control station located on San Clemente Island.

"We are supporting MQ-8C deployments on littoral combat ships while assisting the Navy with Fire Scout mission expansion efforts to include operations from other surface ships and shore-based sites," said [Lance Eischeid](#), director of Northrop's Fire Scout program.

The service plans to deploy the helicopter aboard other LCS units and Constellation-class guided-missile frigates as well as to operate the autonomous vehicle from shore sites.

<https://executivegov.com/2022/08/navy-tests-maritime-expeditionary-use-of-northrop-built-autonomous-helicopter/>

Airbus Zephyr's US Army marathon flight ends hours shy of endurance record

Bruce Crumley - Aug. 22nd 2022



So close, but in the end, no superlative cigar. After 64 straight days of [solar-powered flight](#), the [US Army's](#) Airbus-built Zephyr UAV reportedly plunged from the skies over Arizona, just hours shy of breaking the all-time record for continuous navigation by an aircraft.

When it took off on June 18, the [Airbus-produced](#) Zephyr began what its [US Army](#) operators had hoped would be a 30-day solar power flight to surpass the previous mark of 26 days. Instead, the UAV plowed through that time target with nobody quite sure when it would return to earth. That ultimately occurred with a crash after the aircraft dropped contact with controllers and plunged into the Arizona desert on August 19.



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Though Zephyr barely missed beating the all-time record, the Airbus UAV did surpass the 60-day objective US Army officials had set for the next test flight. [Designed to swoop in the stratosphere](#) at 60,000 to 70,000 feet, the Army had cruised Zephyr at about half those altitudes, where tropospheric elements like wind and rain posed more risks to the craft.

[Airbus said](#) the UAV has a wingspan of 25 meters (entirely covered with solar panels), has a total weight of 75 kg, and is equipped with [frontline and secondary batteries](#) that alternate when the sun is no longer shining on it. Zephyr can [stay aloft for months at a time](#). <https://dronedj.com/2022/08/22/airbus-zephyr-us-army/#more-85493>

FAA-assigned UTM trials headed by Virginia Tech drone team Bruce Crumley - Aug. 22nd 2022



A research unit of Virginia Tech specialized in [UAV traffic management \(UTM\)](#) is leading a second phase of trials under [Federal Aviation Administration \(FAA\)](#) aegis aiming to establish effective, safe, and reliable systems for orchestrating flights of [numerous drones sharing](#) the same airspace.

The [Virginia Tech Mid-Atlantic Aviation Partnership](#) (MAAP) was chosen to lead one of the two teams in [the FAA's new UTM Field Test](#) conducting trials of traffic systems to manage low-altitude flight of UAVs. This second phase of testing follows the FAA's earlier UTM Pilot Program and marks the **sixth major federal contract** Virginia Tech has secured for [researching drone air traffic networks](#).

The effort will involve MAAP partnering with **Texas A&M University** Corpus Christi's Lone Star UAS Center of Excellence along with companies developing various systems that must be integrated in a [unified UTM network](#). Data transmitted from diverse sources must be seamlessly relayed through multiple software platforms and hardware from [an array of individual companies](#).

Among those currently partnering with MAAP are ANRA Technologies, Collins, and OneSky as well as [Google's drone delivery cousin Wing](#). Airspacelink, ATA LLC, Raytheon, and Streamline Designs are also providing software, hardware, and other tech assets in testing the project's drone UTM network. Both the FAA and NASA provide oversight and consulting. <https://dronedj.com/2022/08/22/drone-utm/#more-85481>



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FAA Taps 5 Universities to Study Drone-Based Disaster Assistance Regina Garcia

August 22, 2022



The [research grants](#) have a combined value of **\$2.7 million** and represent the third round of awards made through the FAA-sponsored Alliance for System Safety of UAS through Research Excellence, which aims to facilitate the integration of unmanned aircraft system operations into the national airspace, the agency said Thursday.

“Every second counts in an emergency, and this funding will allow drones to safely and more quickly deploy in moments when minutes matter,” said acting FAA Administrator [Billy Nolen](#).

The grantees and their awards are:

- University of Vermont: \$1.2 million
- University of Alabama Huntsville: \$828,070
- New Mexico State University: \$400,000
- North Carolina State University: \$200,000
- Kansas State University: \$145,000

FAA noted the latest ASSURE funds bring the total awarded under the alliance during fiscal 2022 to **\$21 million**. <https://executivegov.com/2022/08/faa-taps-5-universities-to-study-drone-based-disaster-assistance/>

Tethered Drones Aid Emergency Response Missions Phoebe Grinter / 17 Aug 2022



Heavy-lift Tethered Aerial Vehicle manufacturer Zenith AeroTech has completed delivery of two Quad 8 TAVs to a Federal law enforcement agency for use as a command overwatch solution during emergency response missions.

Each Quad 8 can lift up to 20 pounds of payloads, easily meeting the customer’s need for a long-endurance unmanned aerial platform that could carry Electro-Optical/Infrared (EO/IR) video cameras, a communications relay system, and overhead, high-intensity light panels – all at the same time.



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According to Zenith, the Quad 8 has more than enough capacity to carry a long-range EO/IR camera, a communications relay, and two 17,000-lumen, weather-resistant LED panels.

Hovering at altitudes of 200 to 400 feet, the Quad 8 TAV draws its power from the Ground Power Unit (GPU), which converts AC voltage into high-voltage DC power for the TAV and its payloads. The GPU also runs an automated management system designed to operate even under inclement weather conditions.

“This smart tether system allows the operator to focus completely on the mission, which at the end of the day, is the most important thing,” Kaya said.

https://www.unmannedsystemstechnology.com/2022/08/zenith-aerotech-tethered-drones-aid-emergency-response-missions/?utm_source=UST+eBrief&utm_campaign=cdd8895b1a-ust-ebrief_2022-aug-23&utm_medium=email&utm_term=0_6fc3c01e8d-cdd8895b1a-111778317&mc_cid=cdd8895b1a&mc_eid=acabe18a61

Industrial Unmanned Helicopter Receives Payload Capacity Boost Phoebe Grinter / 23 Aug 2022



FAZER R G2 conventional model (LEFT) and delivery model (RIGHT)

Yamaha Motor Co., Ltd. has further strengthened its FAZER R G2 industrial unmanned helicopter with the

enhancement of its transport and delivery functions.

The company used the automatic navigation version of the model to bolster its response to the expansion of transportation and delivery requirements such as material distribution in mountainous areas and longer-distance deliveries outside of the range of view.

By changing the design and specifications of each part, such as increasing the diameter of the main rotor (rotor blade), FAZER R G2 achieves a maximum effective payload of up to 50kg depending on the usage environment, weather conditions, and altitude – a 15kg improvement on conventional models.

The company has already put into practical use the transportation of power transmission line related materials by consignment for an electric power company, transported products from remote islands in collaboration with airline operators, and to mountainous areas in collaboration with home delivery companies.



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https://www.unmannedsystemstechnology.com/2022/08/fazer-r-g2-industrial-unmanned-helicopter-now-with-50kg-payload-capacity/?utm_source=UST+eBrief&utm_campaign=cdd8895b1a-ust-ebrief_2022-aug-23&utm_medium=email&utm_term=0_6fc3c01e8d-cdd8895b1a-111778317&mc_cid=cdd8895b1a&mc_eid=acabe18a61

AirSeed finds new partner to help plant 100 million trees by 2024 using drones

Ishveena Singh - Aug. 23rd 2022



British engineering and smart tech firm [CAL International](#) says it was approached by AirSeed cofounder Andrew Walker to assist in refining the planting systems for their drone technology. The mission brief was to take AirSeed's existing delivery system and refine the design of the user interface and

manufacturability of the seed pod delivery system.

The AirSeed drone, which uses artificial and data intelligence, is a payload and delivery system that identifies and locates designated target areas with GPS coordinates and then fires carbon pods onto the ground at the rate of two per second. These carbon pods are then pinpointed on the mapping system in line with the flight trajectory, which also considers wind variables and conditions on the day of planting. This allows the drone to return on a reconnaissance flight via the same route to identify and map tree growth.

All in all, AirSeed's aerial platform is **80% cheaper** than current planting methods and **25 times faster** than manual planting methods. Up to **40,000 pods can be planted in a day**.

<https://dronedj.com/2022/08/23/drone-plant-100-million-trees/>

US Army taps AeroVironment JUMP 20 UAV in \$8 million tactical trial

Bruce

Crumley - Aug. 23rd 2022



Defense and security group [AeroVironment](#) has landed another military agency contract with an \$8 million [US Army](#) deal to supply and test a JUMP 20 medium-range UAV for the first increment of the Future Tactical Uncrewed Aircraft System (FTUAS) program.

The not inconsequential income involved notwithstanding, the new [US Army](#) contract is even more significant as a potential opportunity in AeroVironment's ambitions to become a regular and [big provisioner to](#) future tactical drone fleets. [It calls for](#) the Arlington, VA-based company



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to undertake testing of a single JUMP 20 UAV on a sped-up schedule, which if convincing could win the craft status as the FTUAS aerial system of choice.

AeroVironment's JUMP 20 vertical takeoff and landing medium-range UAV is vying to provide aerial [intelligence, surveillance, and reconnaissance services](#) to the [US Army's](#) FTUAS program with a drone the company says offers increased maneuverability and improved command and control over existing tech.

Earlier this month, the company announced the acquisition of autonomous drone navigation [tech firm Planck Aerosystems](#), adding capabilities to its UAVs in negotiating difficult, even moving takeoff and landing platform scenarios.

In recent months it has also won **\$30 million** in new business from various agencies of the US and allied militaries, including aerial assets covered by [aid packages to Ukraine](#) voted by the US Congress. AeroVironment has also landed work worth over **\$20 million** providing the US Special Operations tactical missile systems, and now hopes to expand its presence in the US Army by making JUMP 20 UAVs an integral part of FTUAS fleet.

<https://dronedj.com/2022/08/23/aerovironment-us-army-uav/#more-85505>

Ukraine's Army of Drones donation appeal features slick UAV video Bruce Crumley -
Aug. 23rd 2022



[Ukraine](#) is upping its efforts to beat back Russia's invasion by using both military-grade and consumer UAVs with a slick new post on social media designed to inspire worldwide backers to [donate generously](#) and often to the nation's Army of Drones campaign.

The eye-opening post was uploaded this week by [Mykhailo Fedorov](#), the vice prime minister of Ukraine and minister of digital transformation of Ukraine and who may soon rival President Volodymyr Zelensky for the nation's title of [savviest online communicator](#). In it, Fedorov solicits [additional donations](#) to the Army of Drones initiative, which provides Ukraine forces aerial assets against Russian invaders, and makes his appeal with computer-generated images showing just [how many UAVs](#) have been put aloft thus far by contributions.

The result is a simulated swarm of drones Fedorov asks backers to make even thicker and longer still. <https://dronedj.com/2022/08/23/ukraine-drones-uav/>



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Skydio drones automate Sydney Harbour Bridge inspections Ishveena Singh - Aug. 23rd 2022



Australia's iconic Sydney Harbour Bridge is now being maintained with the help of Skydio inspection drones equipped with artificial intelligence.

The 90-year-old bridge contains 4,100 elements and 485,000 square meters of steel and paint that must be inspected regularly.

The responsibility for Sydney Harbour Bridge's maintenance rests with Transport for New South Wales (TfNSW), which also inspects and maintains another 6,000 bridges across the state.

Now, TfNSW has added Skydio's AI-equipped drones to its arsenal because the time had come for a solution that didn't require "extensive pilot training."

As Transport for NSW director of roads maintenance Jeremy Hards tells [9NEWS](#): "The AI technology with the drones means they can get to all those hard-to-reach places on the bridge and get on top of the maintenance and what we need to do quickly and efficiently. For example, after a disaster, we can get in there and prioritize where we are effectively providing maintenance."

Sphere Drones CEO Paris Cockinos explains that the solution TfNSW chose consists of Skydio 2+ Enterprise drone powered by Skydio Autonomy Enterprise and Skydio 3D Scan.

<https://dronedj.com/2022/08/23/skydio-drone-sydney-bridge-inspection/>

U.S. Army Selects AeroVironment JUMP 20 for Future Tactical Unmanned Aircraft System August 23, 2022 Military | News



[AeroVironment, Inc.](#) today announced it received an Other Transaction Agreement award by the United States Army on Aug. 18, 2022 for Increment 1 of the Future Tactical Unmanned Aircraft System (FTUAS) program. The contract encompasses the purchase, testing and delivery of one JUMP® 20 medium unmanned aircraft system (MUAS) to

a selected Army Brigade Combat Team (BCT) and associated services, training, and support.



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The AeroVironment JUMP 20 is the first fixed-wing unmanned aircraft system capable of vertical takeoff and landing to be deployed extensively in support of U.S. military forces. JUMP 20 delivers 14+ hours endurance, a standard operational range of 115 miles and is runway independent. The system can be set up and operational in less than 60 minutes without the need for launch or recovery equipment and has a useable payload capacity of up to 30 pounds. The JUMP 20 also features a common autopilot and ground control system architecture providing a customizable, modular platform that can be custom configured to meet operational or customer requirements. https://uasweekly.com/2022/08/23/u-s-army-selects-aerovironment-jump-20-medium-unmanned-aircraft-system-for-future-tactical-unmanned-aircraft-system-ftuas-increment-1/?utm_source=rss&utm_medium=rss&utm_campaign=u-s-army-selects-aerovironment-jump-20-medium-unmanned-aircraft-system-for-future-tactical-unmanned-aircraft-system-ftuas-increment-1&utm_term=2022-08-23

24Aug22

NASA Mars Helicopter Goes for a Hop, Proves It's Still Airworthy Amanda Kooser

Aug. 23, 2022



It's been a stressful time for [NASA's](#) Ingenuity helicopter on Mars. The remarkable flying machine has outlived its expected lifespan and weathered [technical snafus](#), while freezing temps and dusty conditions have made it hard to charge its solar-powered batteries enough to get off the ground. But it still flies.

NASA announced Monday that Ingenuity [successfully pulled off its 30th flight](#). "After a two-month hiatus, the rotorcraft did a short hop over the weekend so the team can check its vitals and knock some dust off the solar panel," NASA JPL tweeted.

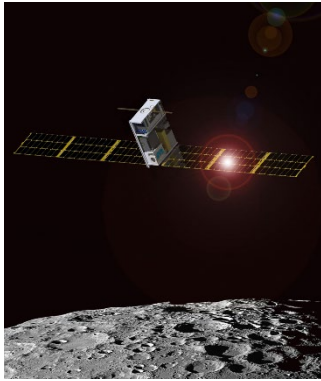
The short-hop flight was designed to cover just 6.5 feet (2 meters) and last 33 seconds, but that small leap is a big deal for the helicopter. <https://www.cnet.com/science/space/nasa-mars-helicopter-goes-for-a-hop-proves-its-still-airworthy/>



UAS and SmallSat Weekly News

Artemis 1 cubesats: The 10 tiny satellites hitching a NASA ride to the

moon Robert Lea published about 19 hours ago.



As part of the Artemis 1 mission, set to launch on Aug. 29, 2022, the Space Launch System (SLS) — the most powerful rocket ever built — is about to catapult the Orion spacecraft further into space than any human-built vehicle intended to carry astronauts has ventured before.

The SLS will also be carrying a secondary payload, a series of shoeboxes sized satellites that it will jettison as it travels towards the moon. Though the SLS can host 17 of these diminutive science experiments, the Artemis 1 payload will be comprised of 10 units.

Though small in size, don't underestimate the big implications these tiny cubesats could have for science. They will collect results that help guide future projects, protect our pioneering astronauts, and help monitor our world. Cubesats are usually measured and classified by 'units' (U) with each unit representing a cube of 10 centimeters (3.93 inches) each side. The majority of cubesats on the Artemis 1 mission are 6U in size, stringing together six of these units.

One of the key goals of the Artemis missions is the establishment of an infrastructure in space, on and around the moon, that allows for longer space missions. The key watchword for this ambition is 'sustainability.'

Developed by Morehead State University in partnership with NASA's Goddard Space Flight Center and the Busek Company, the Lunar IceCube 6U cubesat could help achieve this goal. <https://www.space.com/nasa-artemis-1-moon-mission-cubesats>

Virginia Beach drone company serving Walmart announces \$27.2 million with 655 new jobs

Trevor Metcalfe The Virginian-Pilot Aug 24, 2022



A Virginia Beach drone services company and the sole drone partner of the world's largest retailer just announced plans to expand its headquarters and establish a research and training facility outside Petersburg, creating a total of 655 new jobs.

DroneUp, which has been [working with Walmart](#) since late 2021, announced plans to spend a total of \$27.2 million to



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expand in Virginia Beach and Dinwiddie County.

The company will spend \$7 million expanding its Newtown Road headquarters, a move it says will create 510 new jobs. DroneUp also plans to establish a new testing, training, research and development center for drone operators at Richard Bland College, creating 145 more new jobs.

Virginia successfully competed with Arizona, New York, North Carolina, and Texas for the project. https://www.pilotonline.com/business/vp-bz-drone-up-expansion-0825-20220824-d5kxb3joejelzd7tzfaygvdo5m-story.html?utm_source=newsletter&utm_medium=email&utm_campaign=Breaking%20News&utm_content=6251661355966

Korean Air to build loyal wingman drone for South Korea's air force VALIUS

VENCKUNAS on 19th August 2022



South Korea's Agency for Defense Development (ADD) selected Korean Air as its preferred bidder to build an armed stealth drone.

The development of the system, referred to as "stealth UAV [unmanned aerial vehicle – AeroTime] squadron", started at ADD in November 2021. The agency has already completed the basic design and will work in conjunction with Korean Air on the detailed design.

The aircraft is expected to support manned aircraft in combat, acting as a loyal wingman. In addition, the drone is going to be able to perform missions on its own, the Korean Air press release [says](#).

The flag carrier of South Korea, Korean Air, also has a sizeable research and development division known for manufacturing parts of the country's KF-16 fighter jet and other aircraft. According to Korean Air, the airline already collaborated with ADD in 2010, building and flight testing **the country's first stealth drone**.

Numerous major aircraft manufacturers are currently working on their [loyal wingman programs](#), envisioning a swarm of combat drones working in a team with manned fighter jets. <https://www.aerotime.aero/articles/31956-korean-air-to-build-loyal-wingman-for-south-koreas-air-force>



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Natilus Selects Pratt & Whitney Canada as Engine Supplier for Autonomous Cargo Aircraft August 24, 2022 News



Natilus, a U.S. company producing the world's first purposefully designed and manufactured **autonomous** aircraft for air freight transport, has announced that it has selected Pratt & Whitney Canada to supply the engines for the first of the Natilus family fleet: the N3.8T. The company is initially producing the N3.8T as a prototype and as

long-term short-haul air cargo feeder. The first aircraft is under production and is scheduled to fly in 2024.

"Natilus has designed and developed a blended-wing autonomous aircraft that can offer services at a fraction of the cost of today's transport, while reducing negative impacts on our environment. We wanted to select an engine supplier that shares our vision of innovation, safety and efficiency," said Aleksey Matyushev, Natilus Co-founder and CEO.

"Pratt & Whitney has a long-standing commitment to supporting innovation for sustainable aviation, and so we are pleased that Natilus has recognized the capabilities of the PT6 engine family to increase efficiencies in the air cargo transport industry while reducing carbon emissions," said Nicholas Kanellias, vice president, General Aviation, Pratt & Whitney Canada.

Today, there are only two ways to move cargo internationally: by air and by sea. The difference between the cost and time of these two modes of transportation is dramatic, with sea freight currently 13 times less expensive, but 50 times slower in delivery. Natilus intends to revolutionize the air transport industry by providing the timeliness of air freight at an affordable cost reduction of 60% to increase the competitiveness of the air cargo market.

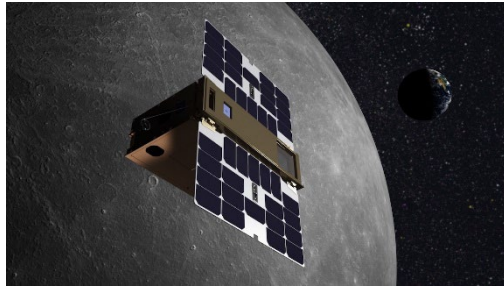
https://uasweekly.com/2022/08/24/natilus-selects-pratt-whitney-canada-as-supplier-of-engines-for-innovative-new-natilus-n3-8t-autonomous-cargo-aircraft/?utm_source=rss&utm_medium=rss&utm_campaign=natilus-selects-pratt-whitney-canada-as-supplier-of-engines-for-innovative-new-natilus-n3-8t-autonomous-cargo-aircraft&utm_term=2022-08-24



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25Aug22

CubeSats on Artemis 1 to pursue bold missions in deep space August 23, 2022 Stephen Clark



Artist's concept of the LunIR CubeSat in orbit around the moon. Credit: Lockheed Martin

The 10 CubeSats hitching a ride to deep space on NASA's Space Launch System moon rocket promise new discoveries about the moon, space weather, and asteroids.

Folded up for launch, the CubeSats are each the size of a large cereal box. They are stowed inside dispensers mounted on the ring-shaped adapter that sits just below the Orion spacecraft on top of the 322-foot-tall (98-meter) SLS moon rocket.

NASA is using excess capacity on the new heavy-lift rocket to launch small CubeSats, a class of diminutive spacecraft that have proliferated in orbits close to Earth to support remote sensing and communications missions. Scientists are eager to use the relatively inexpensive CubeSat design to pursue missions farther from Earth.

The Orion spacecraft will deploy from the SLS upper stage a little more than two hours after liftoff, then the CubeSats will separate from the upper stage one-by-one over the next few hours. <https://spaceflightnow.com/2022/08/23/cubesats-on-artemis-1-to-pursue-bold-missions-in-deep-space/>

26Aug22

Drone News of the Week August 26: DRONELIFE Headlines, All in One Place to Read or Listen Miriam McNabb August 26, 2022



Click on the titles below for the full story.

[DJI Mavic 3 Earns C1 EU Exam Certificate, in a Worlds First: What that Means for Pilots](#)

[Multi-Drone Mapping: Teal Drones and Reveal Technology Demonstrate for US Military](#)



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[Red Cat Holdings](#) subsidiary [Teal Drones](#) announced a partnership with [Reveal Technology](#) in order to equip Reveal's "Farsight" mapping software with the ability to generate high-fidelity 3D maps by autonomously joining imagery from multiple unmanned aerial systems.

[FAA Drone Research Awards: \\$2.7 Million for Disaster Preparedness, Emergency Response](#)

[Researchers Help Underwater Drones Detect Ocean Contaminants, Like Oil Spills or Gas Leaks](#)

[Greater than Tech on Dawn of Drones This Week! Developing Future Leaders](#)

[DroneDeploy Conference 2022: Capturing Reality](#)

[In Calgary, a SAIL 4 BVLOS Urban Drone Operation Measures Aerial Network Performance](#)

[Cybersecurity for Drones: AUVSI and Fortress Information Security Partner to Develop Voluntary Standards](#)

The [Association for Uncrewed Vehicle Systems International](#) (AUVSI) and [Fortress Information Security](#) announced the launch of an industry-wide partnership concentrated on establishing an enterprise cybersecurity model and a set of voluntary standards meant to safeguard uncrewed systems and robotics against cyber risks.

[HiTec New Servo Actuator Gives the Precision Required for Commercial and Military-Grade Fixed Wing Drones](#)

[Hitec Commercial Solutions](#) as announced their new ultra-precise, magnetic encoder MD141SH and high-resolution D141SH digital wing servo actuators.

[EHang Q2 2022 Earning Call: Airworthiness Certificate on the Way](#)

[New York Power Authority Will Use Drones for Power Line Inspections: Enabled by ANRA Software](#)

[Meet Avata, DJIs Newest FPV Drone](#)

<https://dronelife.com/2022/08/26/drone-news-of-the-week-august-26-dronelife-headlines-all-in-one-place-to-read-or-listen/>

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