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Luminati Flight-Tests Solar-Powered Prototype Aircraft.

The [AP](#) (6/10) reported that a Luminati Aerospace test pilot “successfully flew a solar-powered prototype aircraft” on Friday at a former Northrop Grumman defense facility on Long Island. The company envisions developing an unmanned version of the aircraft, called the VO-Substrata, which could be kept aloft “perpetually” to provide aerial Internet service. Luminati CEO Daniel Preston confirmed that “the company is interested in supplying aircraft for intelligence, surveillance, and reconnaissance uses.”

Boeing Files Patent For Solar Powered UAS.

[The Verge](#) (6/12) reports Boeing has filed a patent application for a “Solar Powered Airplane,” which proposes “a wing-shaped drone with enormous winglets on either end completely covered in solar panels,” with the aim of creating a high-altitude UAS that could stay airborne “for long periods of time.” The Verge notes that such aircraft “may be able to take the place of satellites for certain services like long-distance communications.”

Nevada Grants Approval For Development And Testing Of World’s First Single-Passenger UAV.

[International Business Times](#) (6/12) reports that China-based EHang has been granted approval by the office of the Governor of Nevada to develop and test the world’s first passenger UAV, the EHang 184 Autonomous Aerial Vehicle, at FAA-approved UAV testing facilities in the state. Tom Wilczek, with the Governor’s Office of Economic Development, remarked, “I personally look forward to the day when drone taxis are part of Nevada’s transportation system.” The article explains that the UAV, which can be controlled with a mobile app, “can carry a passenger weighing up to 264 pounds, and can reach a maximum flying altitude of 11,480 feet.”

Minnesota Man Disputes FAA Fines For Flying Drones.

In a detailed piece, the [Daily Signal](#) (6/12) reports the FAA has fined Minnesota resident Mical Caterina \$55,000 for violating aviation rules by flying a drone for commercial use in August 2015. The article adds that Caterina is disputing the fines, saying he has never charged anyone for his aerial photography. The article explains that Caterina’s situation “underscores the frustrations drone hobbyists and commercial users have with the FAA as the agency has slowly debated how to keep the rapidly growing drone population under control.” The article mentions that FAA Deputy Administrator Michael Whitaker said Congress that will publish its final rules on drones this month. However Heritage Foundation Analyst Jason Snead said, “The FAA is jumping into this drone policy situation without a clear central plan for how these rules are going to be enforced, how they’re going to be defined, and what kind of activities are the sort that ought to rise to the level of an enforcement action.”

The Making of Drone 100 | Intel 588,428 views

Published on Jan 7, 2016

Intel and Ars Electronica FutureLab explain how they developed Drone 100, a 3D masterpiece of art and airborne technology, using Intel® technology to push the boundaries of what’s possible. <https://www.youtube.com/watch?v=eZ-js5zn-l0>

Drone art. Impressive.

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NASA Seeks Assistance On UAS Sense And Avoid Avionics.

[Military & Aerospace Electronics](#) (6/13) reports that NASA “issued a sources-sought notice” on Friday for the Alternative Airborne Surveillance Systems for Beyond Visual Line of Sight Unmanned Aircraft Systems (UAS) Detect and Avoid project, which aims to “design and integrate airborne sensors” for medium-size UAS, and is concerned with craft operating beyond-line-of-sight under instrument flight rules (IFR) at altitudes higher than 500 feet. Possible sensors include “electro-optical/infrared (EO/IR), light detection and ranging (LIDAR), relatively small radar systems, or small Automatic Dependent Surveillance-Broadcast (ADS-B) avionics.”

CAMCOPTER S-100 UAS Aids Refugee Rescue Missions in the Mediterranean Published: 07 Jun 2016

Schiebel's CAMCOPTER® S-100 UAS is once again supporting the Migrant Offshore Aid Station (MOAS), a global search-and-rescue charity organization. Following successful operations in 2014 and 2015, when more than 10,000 men, women and children were identified and rescued, MOAS and Schiebel will again join forces in order to help refugees in distress at sea.

Besides its takeoff and landing capability on the 40-meter-long MOAS ship MY Phoenix, the S-100 provides real-time daylight and infrared video which enables the MOAS crew to precisely locate and rescue persons in emergency situations and provide them with medical aid from their ship-borne station. The CAMCOPTER® S-100 UAS significantly increases the chances of finding and identifying small ships over long distances beyond horizon, in rough sea conditions and at night.

http://www.unmannedsystemstechnology.com/2016/06/camcopter-s-100-uas-aids-refugee-rescue-missions-in-the-mediterranean/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=b01720a53e-Unmanned_Systems_Technology_eBrief&utm_medium=email&utm_term=0_6fc3c01e8d-b01720a53e-111778317

Sentera Launches Phoenix 2 Fixed-Wing UAV Published: 10 Jun 2016

Sentera, LLC, a global provider of UAV hardware, sensors and data management platforms, has announced the launch of its Phoenix 2 Fixed-Wing Unmanned Aerial Vehicle (UAV). At four pounds, the Phoenix 2 is easily hand-launched in just a few steps, and can carry multiple sensor options for up to an hour of flight time. The professional-grade autopilot constantly auto-calculates and auto-optimizes according to the grid pattern specified to ensure the data collected meets exact specifications.

“Growers are using the Phoenix 2 with agriculture-specific sensors to collect RGB, NIR, and NDVI imagery. That imagery is so precise – [the growers] tell us they’re targeting and treating specific parts of their fields, and then they’re using fewer chemicals, saving money and increasing yields,” continued Colten. “Follow-up flights can be programmed to use the same pattern for exact data comparison at multiple times throughout the growing season.

Hand-launched in just a few steps, the four-pound Phoenix 2 flies autonomously on a predetermined flight pattern that can be updated during flight by accessing the easy-to-use ground station software. Upon completion, the Phoenix 2 automatically returns to safely land.

http://www.unmannedsystemstechnology.com/2016/06/sentera-launches-phoenix-2-fixed-wing-uav/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=b01720a53e-Unmanned_Systems_Technology_eBrief&utm_medium=email&utm_term=0_6fc3c01e8d-b01720a53e-111778317

Welcome to UAViators

"Humanitarian organizations should engage in initiatives like the Humanitarian UAV Network." - United Nations (OCHA) Policy Brief

With well over 2,400 members in 80+ countries, our mission is to promote the safe, coordinated and effective use of UAVs for data collection, cargo delivery and communication services in a wide range of humanitarian and development settings. We do this by developing and championing international guidelines for the responsible use of UAVs. We actively promote operational safety and document lessons learned and best practices. We never self-deploy. We only mobilize at the request of established humanitarian & development partners. We actively promote community engagement and educate UAV operators. We convene Experts Meetings and facilitate information sharing, coordination and learning across all our efforts. Our pilot roster includes 400+ UAV pilots and our partnership with Air-Vid gives us access to 600+ vetted pilots in 60+ countries.

http://uaviators.org/?xg_source=msg_mes_network

O'Qualia Unveils Fully 3D Printed Commercial Fixed-Wing Drone

Published: 09 Jun 2016

O'Qualia, an unmanned aircraft systems (UAS) research and manufacturing company, has announced the launch of its new Captor UAS, which the company claims is the first commercially available fully 3D printed drone. The Captor UAS is designed to be completely modular to adapt and grow with the changing demands and requirements of each customer – bringing future proof technology to the end-user and protecting initial investments.

Designed in four aerodynamic and streamlined sections, the individual components were optimally segregated to ensure the toughest resilience for each 3D printed part. Spares can be reprinted by end-users themselves or ordered from O'Qualia. In addition, the four sections can be assembled and disassembled quickly in the field, making it highly responsive to environment or application changes.

Measuring 800mm in wingspan, the Captor UAS is able to carry up to 450g of payload. Assembled in a precise click mechanism, the airframe and payload compartment can be easily secured in a highly durable manner. A series of stress tests were conducted including application of blunt and short distance momentum force to the airframe and parts demonstrating the resilience of the key components. Inspired by single-bead 3D printing techniques, the key contributing factor lay in the design of skin and internal framing whose structure was stiff enough to withstand force and yet light enough to be power optimal.

http://www.unmannedsystemstechnology.com/2016/06/oqualia-unveils-fully-3d-printed-commercial-fixed-wing-drone/?utm_source=Unmanned+Systems+Technology+Newsletter&utm_campaign=b01720a53e-Unmanned_Systems_Technology_eBrief&utm_medium=email&utm_term=0_6fc3c01e8d-b01720a53e-111778317

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Passenger Drones Could Change Travel Landscape.

In continuing coverage, [Motley Fool](#) (6/14) reports that China-based Ehang has received clearance to test its new passenger drone in Nevada, “opening an entirely new form of travel for consumers,” which may entail using drones to commute to and from work. The article explains that the Ehang 184 is “a personal drone that can fly a 220-pound person at 62 miles per hour for 23 minutes,” and can be operated with an app “that allows for point-by-point flying instructions to be given to the drone,” without any piloting skills. The article adds that given recent revelations that Google may be working on developing “flying cars,” the search giant “seems like a natural partner for passenger drone companies.”

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Drone Deliveries Could Represent 80% Savings In Last-Mile Costs.

[Business Insider](#) (6/15) reports that according to a Deutsch Bank note published on Wednesday, delivery automation, using robots and drones, could cut Amazon’s last-mile delivery costs by 80 percent, representing Amazon’s “biggest cost reduction” opportunity. The note said, “Robots and drones would reduce this to near-zero immediately and allow for much faster delivery times,” and ARK Investment management said the online retailer could charge \$1 for drone deliveries. Amazon would begin using drones to deliver “small packages, weighing less than 5 pounds – and given that 86% of orders shipped by Amazon weigh less than that, the benefits are tremendous both ways.”

Drones and Privacy Just Got More Complicated

By: Kevin D. Pomfret 06.16.2016

Currently, there is no federal law that specifically governs the collection, use, storage, or distribution of data collected from UAS. In the absence of federal rules, several states have passed laws that do regulate UAS-collected data. While a number of other states have considered similar legislation, most states still have not passed UAS-specific privacy laws and are relying on existing laws and regulations to address any perceived privacy concerns.

President Obama issued a Presidential Memorandum on February 15, 2015 directing the National Telecommunications and Information Administration (NTIA) to convene a multi-stakeholder group with a goal of developing voluntary best practices for protecting privacy, civil rights, and civil liberties while using UAS. The group, which consisted of a number of UAS trade associations, civil liberty groups, academics, and a few potential users of UAS-collected data, held multiple meetings beginning in the summer of 2015. This past month, the NTIA announced that a consensus had been reached among a number of the participants. A copy of the “Voluntary Best Practices for UAS Privacy, Transparency, and Accountability” (“Voluntary Best Practices”) document can be accessed here. The NTIA website also contains comments from several participants both supporting and disagreeing with the final document. These comments can be found here.

<http://www.williamsmullen.com/news/drones-and-privacy-just-got-more-complicated>

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AIAA And Drone World Expo Partner To Create New, Innovative Unmanned Aerial Systems Research Competition.

In a press release, the [American Institute of Aeronautics and Astronautics](#) (6/16) announced that it has partnered with Drone World Expo (DWE) to launch the Innovative Drone Exploration and Application (IDEA) Competition, “a new

research-related contest in the field of Unmanned Aerial Systems (UAS).” The contest is intended “to build ties between the UAS end-user community and members of the aerospace community who are actively researching the capabilities and applications of UAS technologies.” Richard Stansbury, chair of AIAA’s Unmanned Systems Program Committee (USPC), said in a statement, “. I am confident that this competition will do much to forge strong links between the UAS R&D and end-user communities, and will advance UAS technology in exciting ways.”

NASA Official: 2.7 Million Commercial Drones Will Be Flying By 2020.

[USA Today](#) (6/16) reports that Parimal Kopardekar, NASA’s principal investigator for drone traffic management, said Thursday during AIAA AVIATION 2016 that roughly 2.7 million commercial drones will be in sky by 2020. NASA is currently helping the FAA formulate rules for commercial drone use, which could allow Amazon, Walmart, and Google “to fly safely and reliably.” Amazon Prime Air Director of Strategic Partnerships Sean Cassidy, a former airline pilot, said Amazon will use various types of drones for different deliveries. When asked about public concerns over operating drones in urban areas, he said, “We want to be good neighbors.”