

A Publication of the Vertical Flight Society

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VERTIFLITE

Advancing Vertical Flight Since 1943



Air Force Primes the eVTOL Industry

US Military Program Roundup
Next Gen Military Rotorcraft
Air Launched Effects

Piasecki's VTOL Innovations
Archer's United Leap
Embry-Riddle PAV-ER Testbed

Lufthansa on Air Taxis

Lufthansa Innovation Hub and Lufthansa Technik released a report on Feb. 3 entitled, “Are air taxis ready for prime time?” According to the company, the engaging report “provides a data-driven view into the state of the air taxi ecosystem including a patent analysis ranking eVTOL technology leaders.” The report analyzed several interesting factors, including a global media, venture capital, academic research and patents. The report is available at Lufthansa’s “Travel and Mobility Tech” site, www.TMNT.com.



Skyworks is a \$100M GEM



Skyworks Aeronautics Corp. announced on Feb. 8, a \$100M investment commitment from GEM Global Yield LLC SCS, a fund of the Luxembourg Global Emerging Markets Group (GEM). Skyworks is the successor to Groen Brothers (see “Gyroplanes: From Novelty to Mainstream?” *Vertiflite*, March/April 2019). “Skyworks Aeronautics will use the funds to move forward with the commercialization of its cutting-edge gyroplane aircraft, including the eGyro electric air taxi (shown), geared towards urban air mobility and the 400 mph [645 km/h] VertiJet VTOL aircraft that competes directly with helicopters, but at a much higher speed, longer range and lower operating cost,” said the Skyworks press release.

The company had been publicly traded “over the counter” on the OTCQB exchange under the symbol “ASDN.” On Feb. 17, Astro announced it had appointed Kingswood Capital Markets in preparation to become a NASDAQ-listed company under the ticker symbol ASDND. Then, one day later, Astro announced it has entered a binding agreement to acquire Horizon Aircraft, Inc., based in Canada, which is developing the five-passenger Cavorite X5 eVTOL.

Astro Horizon Connection

Astro Aerospace of Dallas, Texas, has been developing manned and unmanned derivatives of its Astro design based on the PassengerDrone (shown) — one of the first eVTOL demonstrators, with first manned flights in 2017 (see “Astro’s Elroy Blasts Off,” *Vertiflite*, Nov/Dec 2018). Last year, Astro introduced the Alta platform using a “top frame” multicopter design with eight pairs of coaxial propellers that can connect different specific-use “pods” for two or four passengers, as well as the Orbit cargo pod.

eSTOL Updates



San Francisco, California-based Airflow announced at the VFS eVTOL Symposium in January that it was beginning development of “one of the first full-scale piloted technology demonstrators of an eSTOL aircraft.” For the last year, Airflow has been utilizing a sub-scale model for test flights that have helped develop its eSTOL flight control technology. The next phase will convert a Cessna 210 into an eSTOL with distributed electric propulsion (DEP). DEP enables operations into and out of very short runways by providing more control at slower airspeeds. Airflow was founded in 2019 by five former Airbus Vahana team members to bring eSTOL capabilities to the middle-mile logistics market.

