



SIKORSKY LOOKS TO FUTURE FAMILY OF VTOL SYSTEMS

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Sikorsky unveiled its plan to build, test and fly a hybrid-electric vertical takeoff and landing demonstrator with a tilt-wing configuration. The design is the first in a series of large, next generation VTOL aircraft — ranging from more traditional helicopters to winged configurations — which will feature varying degrees of electrification, and an advanced autonomy system for optionally piloted flight. The HEX program will put a premium on greater than 500 nautical mile range at high speed, fewer mechanical systems to reduce complexity, and lower maintenance costs.

Sikorsky President Paul Lemmo commented: “We never stop innovating at Sikorsky. Autonomy and electrification will bring transformational change to flight safety and operational efficiency of large VTOL aircraft. Our HEX demonstrator program will provide valuable insights as we look to a future family of aircraft built to the scale and preferred configurations relevant to commercial and military customers.”

Igor Cherepinsky, Sikorsky Innovations director, said: “Within Sikorsky’s electric pillar, we are designing electric motors, power electronics and our own vehicle management hardware and actuation. HEX will integrate these components, showcase the growing maturity of our [MATRIX autonomy suite](#), and the potential for maintenance-free systems. Seeing the results will lead us to

more efficient overall designs.”

Sikorsky Innovations, the company’s prototyping group, and GE Aerospace are finalizing designs to build a hybrid-electric power systems testbed with a 600kW electric motor. The testbed is a first step to evaluate hover performance of the follow-on HEX demonstrator — a 9,000-pound maximum gross weight aircraft with 1.2MW-class turbogenerator and associated power electronics.



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